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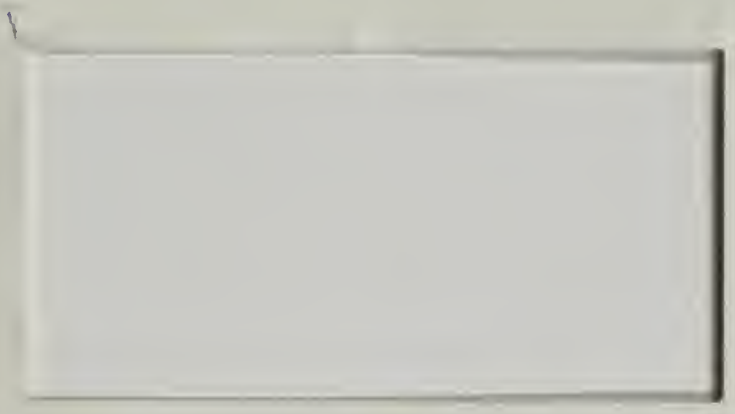

aeromet inc.

P.O. BOX FF NORMAN, OKLAHOMA 73069
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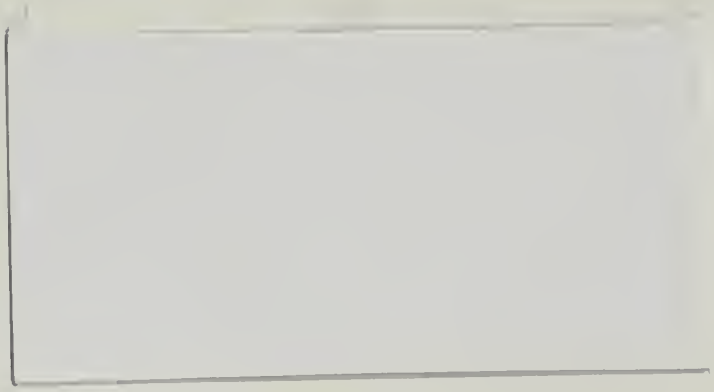

MONTHLY PROGRESS REPORT NO. 5

for the period July 1-31, 1976

to

ENVIRONMENTAL PROTECTION AGENCY

REGION VIII

1860 Lincoln St., Suite 900

Denver, CO 80203

Contract No. 68-01-1946

by

Aeromet, Inc.

Box FF

Norman, OK 73070

COLORADO Cb TRACT

1.0 INTRODUCTION

Low level temperature and wind data were collected for July 1976 at Casper, Wyoming; the Shell Oil Co. Colorado CB Tract 25 miles west of Rio Blanco, Colorado; Craig, Colorado; Escalante and Hanksville, Utah; and Rock Springs, Wyoming. The data collection was made using a 30 gm helium filled pilot balloon with a temperature sonde attached, a single theodolite and a TSR-2 receiver/recorder twice a day every other day. The observations were made 1/2 hour after sunrise and 1400L.

The pilot balloon had an ascent rate of 500 ft/min and it was tracked by a single theodolite for 12 minutes with the azimuth and elevation angles recorded every 30 seconds on a cassette tape recorder. The tape was transcribed to a pilot balloon form after the observation.

The temperature sonde operated at 403 MHz and the signal was received by a ground plane antenna at least 24 ft. AGL which was attached to the Aeromet, Inc. TSR-2 receiver/recorder. The TSR-2 receiver has a built in Rustrak strip chart recorder and the temperature was recorded within the range from -50 to +50°C. A baseline temperature calibration was performed with each T-Sonde by the adjustment of the recorded temperature to match the thermometer measured temperature next to the transmitting sonde. Once the calibration check was finished the balloon was released with the sonde attached and the temperature was recorded for at least 20 minutes. At the completion of each observation the data were mailed to Aeromet, Inc.

The Monthly Progress Report is divided into six parts, one corresponding to each of the six field sites. The collected temperature and wind data are accurate and have not been edited unless otherwise stated in the Pilot Balloon Summary section. However, the obvious errors sometimes found in the recorded azimuth and elevation angles are corrected without mention. For example, the sequence of azimuth angles . . . 76.6, 75.3, 47.8, 73.8 . . . can be corrected without ambiguity. The more ambiguous errors are brought to the attention of the reader if editing has been performed, otherwise, the data are left as recorded and the filtering is left to the individual user. An example is the wind profile for Hanksville on 06/29/76 at 1300 MST found in the Monthly Progress Report No. 4. The azimuth angles starting 30 seconds after the launch and incremented by the same are as follows . . . 109.0, 110.0, 110.0, 281.0, 280.0, 282.0 . . . , while the corresponding elevation angles are as follows, . . . 60.0, 57.6, 58.7, 58.6, 52.7, 44.3 . . . . The wind speed and direction change dramatically over the interval as can be seen in the report since these data were not edited.

2.0 DATA SUMMARY

2.1 Colorado Cb Tract Field Summary

The primary observer was sent to Lousiana until 17 August and the secondary observer took over the balloon launches. The quality of the data collection dropped until reaching the point of no longer doing the observations after 27 July. Numerous attempts were made to reach the observer with messages left daily to have the call returned. The observer avoided all attempts to be reached and it was not until 13 August that he stated the balloon launches were too much of a hassle and he did not want to be bothered with them.

The balloon ascent rate was reduced to 500 ft./min. before the morning launch on 9 July. The reduced ascent rate will cut down on the use of helium and will reduce the balloon breakage.

The lighter wind conditions are the cause for the large wind direction variation found in the data for the month.

The observer attempted 69% of the scheduled pilot balloon launches resulting in 66% recovery of the temperature data and 69% recovery of the wind data. A 3% loss of temperature data can be attributed to equipment malfunction and the remaining 31% loss of temperature and wind data are due to the lack of an attempt to do the balloon launches.

2.2 Mixing Layer Height

The average mixing layer height was derived subjectively from the morning and afternoon temperature and wind profiles. The morning sounding was near the minimum temperature while the afternoon sounding was near the maximum temperature providing a good comparison for defining an average mixing layer height. If the mixing layer height derived from only the morning sounding for the lower 2000m was not maintained throughout the day because of temperature changes due to advection, then one was not defined to exist. A blank indicates there were insufficient data to calculate a mixing layer height. It is still contended that for the proper scientific evaluation and interpretation of the mixing layer height that an objective method be used. A library research on the topic is continuing, however the most acceptable method is to measure the minimum and maximum temperatures, add a heat island effect factor and trace the dry adiabatic to the point of intersection on the given temperature profile. The field sites are not equipped with minimum/maximum thermometers so an alternative method is under investigation.

2.3 Stability and Inversion Classification

The temperature and wind data were edited to remove data felt to cause anomalous results in the stability and inversion classification schemes. Only the stations listed prior to the table classifying the inversions were used in the calculations.

3.0 DATA PROCESSING

3.1 Printed and Plotted Output

Wind speeds and directions are computed from the azimuth and elevation angles measured while tracking the balloon with the theodolite. The wind speed and direction are plotted versus height and printed out at 30 second intervals. The printed output includes the AGL and MSL height of the calculated wind value and the orthognal components of the wind. The wind profile is also punched on computer cards at 30 second intervals.

The temperature data are processed and plotted with the temperature and the lapse rate per 300 meters versus height at 15 second intervals. Tic marks are placed on the temperature plot at significant levels. A solid line to the right side of the plot indicates the data for that layer are interpolated temperature values. The temperature data are also printed out and punched on cards. The asterisk beside a height value indicates a significant level while a "?" indicates interpolated data.

The temperature data are also processed to produce for each site a monthly summary of inversion layers and lapse rates within the inversions and from the inversion base to the surface by means of the Holzworth classification scheme for inversions (Holzworth, G.C., 1974: "Climatological Data on Atmospheric Stability in the United States" Paper presented at the American Meteorological Society Symposium on Atmospheric Diffusion and Air Pollution, September 9-13, 1974. Santa Barbara, California.)

The temperature and wind data are processed together to produce for each site a monthly average bivariate frequency distribution of wind direction versus wind speed represented in the 500m layer adjacent to the ground. The distribution is presented by the six Pasquill stability classes (A-F) and a summary independent of stability. If the $\Delta T/100m$ criterion is met but the wind speed criterion is not met, then the

STABILITY CLASS	ΔT (°C/100m)	WIND SPEED
A	<-1.9	≤ 2
B	-1.9 - -1.7	≤ 5
C	-1.7 - -1.5	≤ 6
D	-1.5 - -0.5	ALL SPEEDS
E	-0.5 - 1.5	≤ 5
F	>1.5	≤ 3

wind data are checked against the criterion for the next stability class, always cascading to the D stability class. Once the wind speed criterion is met the data are classified under the new stability class even though now the lapse rate exceeds the class criterion. For example,

if the $\Delta T/100m$ value is 1.7 and the wind speed is 7 m/s, the lapse rate criterion is met for the stability class F, however the wind speed criterion is exceeded. The wind speed is greater than the 5 m/s maximum limit for class E but falls within the criterion of class D, which includes all wind speeds. As a result the observational data with a ΔT value of 1.7°C/100 m and a wind speed value of 7 m/s are classified under stability class D, not class F.

The data are also punched on computer cards in a format compatible with the STAR PROGRAM of the National Climatic Center, NOAA, U.S. Department of Commerce.

3.2 Punched Output

The punched temperature and wind data for each observation are categorized into four groups, each separated by a blank card. The first group begins with a header card listing the station name (3A4), the station elevation in meters (I4), the month, date and year (I6), the observation time (I4), the time zone (A3), the balloon ascent rate in feet per minute (I3), the sampling interval in seconds (I2), the temperature error in °C (F5.1), the T-Sonde I.D. number (I5) and the surface wind speed in kts and direction (2F6.1). A surface wind speed of 180.0 KTS indicates missing surface wind data. The series of cards prior to the first blank card include on each card the elapse time in minutes (2X,F5.1), the height of the balloon in meters AGL (4X,F5.0), the height of the balloon in meters MSL(4X,F5.0), the temperature in °C (4X,F6.2), the change in temperature between standard or significant levels (2X,F6.2), the lapse rate per 300m (2X,F6.2), the difference in the lapse rate per 300m and the dry adiabatic lapse rate per 300m (2X,F6.2), the wind speed in m/s if known (4X,F5.1), and the wind direction if known (3X,F5.0). The cards following the first blank card include on each card the elapse time in minutes (2X,F5.1), the height in meters AGL (4X,F5.0), the height in meters MSL (4X,F5.0), the u-component of the wind in m/s (4X,F6.1), the v-component of the wind in m/s (6X,F6.1), the wind speed in m/s (7X,F5.1), the wind direction (6X,F5.0), the elevation angle in degrees (F5.1) and the azimuth angle in degrees (F5.1). The cards after the second blank card include a header card like before and a series of cards with four groups of the following on each card; the height in meters AGL (F6.1), the temperature in °C (F6.2), the lapse rate °C/300m (F6.2) and a blank space (1X). The cards after the third blank card include a header card the same as described earlier, eight cards with the original digitized temperature data and a flag to indicate interpolated data (20(F3.1,I1)), five cards with the elevation angle in degrees (16F5.1), and five cards with the azimuth angle in degrees (16F5.1). The temperature data are in degrees Celsius and have 50°C added to each value. An elevation angle of 180° indicates a missing azimuth and elevation angle value.

The punched output from the bivariate frequency distribution calculations include a header card as illustrated below,

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MONTH: MARCH      YEAR: 1976.     CASPER          SFC TO 500 METERS
```

and the punched distribution data for each wind direction under each stability class in agreement with the "star" output. The stability classes are number coded as follows:

STABILITY CLASS	NUMBER CODE
A	1
B	2
C	3
D	4
E	5
F	6
Independent of Stability	7

The station I.D. numbers are as follows:

STATION	I.D. Number
Casper, Wyoming	1
Colorado CB Tract	2
Craig, Colorado	3
Escalante, Utah	4
Hanksville, Utah	5
Rock Springs, Wyoming	6

The month and season number codes are as follows.

MONTH	1-12
SEASON	13=DJF
	14=MAM
	15=JJA
	16=SON
ANNUAL	17

PILOT BALLOON SUMMARY
COLORADO Cb TRACT
July, 1976

July 1	0600	The temperature data were interpolated over the interval from 12 to 15 minutes elapsed time.
	1230	The temperature sonde malfunctioned at launch. No temperature data were recovered and no attempt was made to launch a second sonde.
July 3	0600	The temperature data were noisy during the interval from 3 to 6½ minutes elapsed time so the data were smoothed.
	1230	The signal from the sonde was temporarily lost for the two minute intervals starting at 4 and 8 minutes. The data were interpolated over the interval.
July 5	MORN, AFTN	No balloon releases were made.
July 7	MORN, AFTN	No balloon releases were made.
July 9	0615	The balloon ascent rate was reduced to 500 ft/min.
	1100	The observer had to release the balloon early because of circumstances on the tract.
July 11	0645	
	1130	The temperature data for the interval from 3 to 5 minutes are interpolated data.
July 13	0715	The first temperature sonde released was defective so a second sonde was released. The signal from the sonde was noisy resulting in the smoothing of the temperature data over the interval from 4 to 8 minutes.
	1200	The temperature data were smoothed over the interval from 4 to 5 minutes and 7 to 10 minutes.

PILOT BALLOON SUMMARY
COLORADO Cb TRACT
July, 1976

July 29 MORN, AFTN — No balloon releases were made.

July 31 MORN, AFTN — No balloon releases were made.

CLOUD COVER AND SIGNIFICANT WEATHER
COLORADO Cb TRACT

July, 1976

DATE	MORNING	AFTERNOON
1	clear	clear
3	clear	clear
5		
7		
9	scattered	clear
11	clear	scattered
13	clear	scattered
15	clear	clear
17	scattered	scattered
19	broken	broken
21	clear	clear
23	clear	clear
25	broken	overcast, rain S-SW
27		
29		
31		

AVERAGE MIXING LAYER HEIGHT
COLORADO Cb TRACT
July 1976

DATE	HEIGHT
1	1500m
3	700m
5	
7	
9	100m
11	1500m
13	1100m
15	600m
17	1200m
19	1000m
21	1500m
23	none defined
25	1100m
27	
29	
31	

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2739

TE 07/01/76 TIME 06:00MST ASCENT RATE 600 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		16.00		0.0		2.1	270.
0.7	150	2192	12.43	-3.57	-3.61	-0.68	4.0	165.
1.1	300	2342	11.25	-1.17	-4.26	-1.34	6.6	160.
1.8	458.	2500.	9.30	-1.89	-4.10	-1.17	4.6	178.
2.0	500	2542	9.03	-0.32	-3.28	-0.35	4.3	186.
3.8	958.	3000.	4.20	-4.79	-6.07	-3.14	4.2	205.
8.5	1956.	4000.	-2.20	-6.45	-1.80	1.12	3.9	225.
13.7	2958.	5000.	-10.70	-8.00	-1.97	0.96	5.2	243.

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2739

TE 07/01/76 TIME 06:00MST ASCENT RATE 600 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	2042.	2.1	0.0	2.1	270.
0.5	91.	2133.	-0.5	2.4	2.5	169.
1.0	269.	2311.	-2.6	6.7	7.2	159.
1.5	379.	2421.	-1.3	5.0	5.1	165.
2.0	499.	2541.	0.4	4.2	4.3	185.
2.5	616.	2658.	2.0	3.7	4.2	208.
3.0	721.	2763.	1.8	2.3	2.9	219.
3.5	854.	2896.	1.6	3.3	3.6	206.
4.0	1019.	3061.	1.9	4.2	4.6	205.
4.5	1189.	3231.	3.0	3.5	4.5	223.
5.0	1324.	3366.	2.2	2.7	3.5	219.
5.5	1415.	3457.	2.1	1.5	2.6	236.
6.0	1507.	3549.	1.7	1.3	2.2	233.
6.5	1598.	3640.	1.1	1.0	1.5	227.
7.0	1689.	3731.	1.8	0.8	2.0	246.
7.5	1781.	3823.	0.9	1.2	1.5	216.
8.0	1872.	3914.	1.9	0.7	2.0	249.
8.5	1964.	4006.	2.8	3.0	4.0	223.
9.0	2055.	4097.	2.4	0.1	2.4	268.
9.5	2147.	4189.	2.3	0.7	2.4	253.
10.0	2272.	4314.	3.0	1.8	3.5	239.
10.5	2367.	4409.	2.9	2.0	3.5	236.
11.0	2459.	4501.	4.0	3.3	5.2	230.
11.5	2550.	4592.	2.0	2.6	3.3	217.
12.0	2642.	4684.	2.8	2.2	3.5	231.
12.5	2733.	4775.	2.9	1.9	3.5	238.
13.0	2824.	4866.	2.7	1.7	3.2	237.
13.5	2916.	4958.	5.7	2.0	6.0	251.
14.0	3007.	5049.	3.4	2.4	4.2	235.
14.5	3099.	5141.	3.4	2.2	4.0	237.

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2737

TE 07/01/76 TIME 1213OMST ASCENT RATE 600 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		M				2.6	270.
0.8	150	2192					1.6	210.
1.6	300	2342					2.4	179.
2.5	458.	2500.					2.7	175.
2.7	500	2542					2.8	178.
5.2	958.	3000.					3.0	193.
10.7	1958.	4000.					3.7	206.

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2737

ATE 07/01/76 TIME 1213OMST ASCENT RATE 600 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	2042.	2.6	0.0	2.6	270.
0.5	91.	2133.	0.8	1.3	1.5	213.
1.0	183.	2225.	0.8	1.4	1.6	208.
1.5	274.	2316.	0.1	2.2	2.2	181.
2.0	366.	2408.	-0.4	2.9	2.9	173.
2.5	457.	2499.	-0.2	2.6	2.7	175.
3.0	549.	2591.	0.1	2.9	2.9	182.
3.5	640.	2682.	0.1	2.6	2.6	183.
4.0	732.	2774.	1.4	3.0	3.3	206.
4.5	823.	2865.	0.9	2.8	2.9	198.
5.0	914.	2956.	0.8	2.9	3.0	195.
5.5	1006.	3048.	0.6	3.0	3.1	191.
6.0	1097.	3139.	0.6	3.0	3.1	190.
6.5	1189.	3231.	2.5	4.8	5.4	208.
7.0	1280.	3322.	3.9	5.5	6.8	215.
7.5	1372.	3414.	3.3	4.7	5.9	222.
8.0	1463.	3505.	1.4	3.4	3.7	203.
8.5	1554.	3596.	1.5	3.4	3.8	204.
9.0	1646.	3688.	1.7	3.9	4.2	204.
9.5	1737.	3779.	1.4	3.4	3.7	202.
10.0	1829.	3871.	1.8	4.3	4.7	203.
10.5	1920.	3962.	1.8	3.5	3.9	208.
11.0	2012.	4054.	1.4	3.1	3.4	205.
11.5	2103.	4145.	1.1	3.2	3.4	198.
12.0	2195.	4237.	2.3	4.0	4.6	210.

COL CB TRACT

07/03/76 TIME 06:00MST

EV 2042 METERS SOUNDING ID 2738

ASCENT RATE 600 FPM DATA INTERVAL 15 SEC.

HEIGHT M (AGL)	HEIGHT M (MSL)	TE DEF	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
SFC		2	.00	0.0		0.0	0.
150	2192	1	.39	-1.61	-2.30	0.63	0.9	284.
300	2342	1	.52	-0.87	-2.69	0.30	0.9	262.
458.	2500.	1	.20	-1.59	-2.79	0.14	0.9	245.
500	2542	1	.26	-0.66	-2.79	0.14	1.0	251.
958.	3000.	1	.80	-3.26	-2.13	0.80	0.6	198.
1958.	4000.		.50	-9.19	-3.44	-0.52	0.8	201.
2958.	5000.	-	.90	-7.71	-1.15	1.78	M	M

COL CB TRACT

07/03/76 TIME 06:00MST

EV 2042 METERS SOUNDING ID 2738

ASCENT RATE 600 FPM DATA INTERVAL 15 SEC.

EN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-MP /S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0	0.	2042.	.0	0.0	0.0	0.
5	91.	2133.	.4	-0.4	1.5	287.
5	183.	2225.	.5	-0.1	0.5	283.
5	274.	2316.	.9	0.1	0.9	263.
5	366.	2408.	.8	0.1	0.8	260.
5	457.	2499.	.8	0.4	0.9	245.
5	549.	2591.	.1	0.2	1.1	258.
5	640.	2682.	.1	0.8	0.8	172.
5	732.	2774.	.5	0.9	1.0	210.
5	823.	2865.	.2	0.4	0.5	212.
5	914.	2956.	.1	0.1	0.2	234.
5	1006.	3048.	.4	1.0	1.1	159.
5	1097.	3139.	.2	1.3	1.4	173.
5	1189.	3231.	.2	0.2	0.3	143.
5	1280.	3322.	.1	0.6	0.6	169.
5	1372.	3414.	.2	0.3	0.3	214.
5	1463.	3505.	.1	0.7	0.7	174.
5	1554.	3596.	.3	0.7	0.8	156.
5	1646.	3688.	.4	1.3	1.3	195.
5	1737.	3779.	.3	1.1	1.1	195.
5	1835.	3877.	.3	1.1	1.1	196.
5	1935.	3977.	.2	0.8	0.9	202.
5	2031.	4073.	.1	0.6	0.7	199.
5	2129.	4171.	.0	0.2	0.2	200.
0	2220.	4262.		0.1	0.1	199.

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2735

ATE 07/03/76 TIME 12:30MST ASCENT RATE 600 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		20.00		0.0		2.6	270.
0.8	150	2192	18.51	-1.49	-2.95	-0.02	2.1	339.
1.6	300	2342	17.23	-1.27	-4.10	-1.17	1.0	328.
2.3	458.	2500.	15.20	-1.98	-3.61	-0.68	1.4	324.
2.5	500	2542	14.93	-0.32	-2.30	0.63	1.6	329.
4.9	958.	3000.	11.00	-3.92	-2.62	0.30	1.7	314.
10.3	1958.	4000.	3.20	-7.80	-2.62	0.30	2.4	312.
15.7	2958.	5000.	-4.00	-7.21	-0.33	2.60	M	M

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2735

)ATE 07/03/76 TIME 12:30MST ASCENT RATE 600 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	2042.	2.6	0.0	2.6	270.
0.5	91.	2133.	0.7	-2.3	2.4	342.
1.0	183.	2225.	0.7	-1.7	1.9	337.
1.5	274.	2316.	0.4	-0.8	0.9	332.
2.0	379.	2421.	0.7	-0.7	1.0	314.
2.5	499.	2541.	0.8	-1.4	1.6	329.
3.0	600.	2642.	0.8	-1.5	1.7	332.
3.5	691.	2733.	1.0	-1.8	2.1	331.
4.0	785.	2827.	0.7	-1.5	1.7	335.
4.5	887.	2929.	1.4	-1.6	2.1	318.
5.0	979.	3021.	1.2	-1.1	1.6	313.
5.5	1070.	3112.	1.3	-1.7	2.1	321.
6.0	1166.	3208.	0.4	-0.2	0.5	298.
6.5	1257.	3299.	0.8	-1.1	1.3	323.
7.0	1349.	3391.	0.6	-0.7	0.9	318.
7.5	1440.	3482.	1.2	-1.8	2.2	326.
8.0	1531.	3573.	1.4	-1.6	2.2	319.
8.5	1623.	3665.	1.6	-1.5	2.2	312.
9.0	1714.	3756.	1.3	-1.6	2.1	321.
9.5	1806.	3848.	1.9	-0.7	2.1	291.
10.0	1897.	3939.	1.7	-1.1	2.0	302.
10.5	1989.	4031.	1.7	-1.9	2.5	317.
11.0	2080.	4122.	1.2	-1.6	2.0	323.
11.5	2180.	4222.	1.9	-1.9	2.7	314.
12.0	2271.	4313.	2.0	-1.9	2.8	315.

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2734

TE 07/09/76 TIME 06:15MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		23.10		0.0		0.5	270.
1.0	150	2192	22.20	-0.90	-2.16	0.76	0.7	169.
1.9	300	2342	20.61	-1.60	-2.56	0.37	2.9	200.
3.0	458.	2500.	19.30	-1.30	-2.95	-0.02	4.4	208.
3.2	500	2542	18.80	-0.50	-1.57	1.35	3.1	209.
6.2	958.	3000.	16.30	-2.40	-1.77	1.16	5.4	236.
12.8	1958.	4000.	8.20	-8.20	-2.95	-0.02	M	M
18.7	2958.	5000.	-1.40	-9.60	-3.15	-0.22	M	M

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2734

TE 07/09/76 TIME 06:15MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	2042.	0.5	0.0	0.5	270.
0.5	76.	2118.	0.7	0.5	0.9	239.
1.0	152.	2194.	-0.2	0.7	0.7	167.
1.5	233.	2275.	-0.8	1.1	1.3	145.
2.0	311.	2353.	1.5	2.8	3.2	209.
2.5	387.	2429.	1.0	1.6	1.9	211.
3.0	463.	2505.	2.1	4.0	4.6	208.
3.5	540.	2582.	0.7	1.3	1.5	209.
4.0	616.	2658.	1.1	2.7	2.9	201.
4.5	692.	2734.	0.8	2.6	2.8	197.
5.0	768.	2810.	1.8	2.9	3.5	212.
5.5	844.	2886.	5.2	3.1	6.0	239.
6.0	921.	2963.	5.2	3.5	6.2	236.
6.5	997.	3039.	3.7	2.5	4.5	236.
7.0	1073.	3115.	6.3	1.8	6.5	254.
7.5	1149.	3191.	4.8	1.4	5.0	254.
8.0	1225.	3267.	5.3	1.2	5.5	257.
8.5	1302.	3344.	6.2	0.7	6.2	264.
9.0	1378.	3420.	4.7	0.7	4.7	261.
9.5	1454.	3496.	4.7	0.4	4.7	266.
10.0	1532.	3574.	4.5	0.9	4.6	259.
10.5	1608.	3650.	4.4	-0.1	4.4	272.
11.0	1685.	3727.	4.0	1.2	4.1	254.
11.5	1761.	3803.	3.5	0.9	3.6	255.
12.0	1837.	3879.	3.5	1.5	3.8	246.

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2735

DATE 07/09/76 TIME 11:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		30.30		0.0		2.6	180.
1.0	150	2192	29.40	-0.90	-2.36	0.57	2.5	168.
2.0	300	2342	28.30	-1.10	-2.16	0.76	1.4	181.
3.0	458.	2500.	26.60	-1.66	-3.35	-0.42	2.8	175.
3.3	500	2542	26.60	-0.04	-3.35	-0.42	3.1	169.
6.1	958.	3000.	22.20	-4.09	-2.76	0.17	3.0	253.
12.4	1958.	4000.	13.90	-8.60	-2.95	-0.02		
18.6	2958.	5000.	4.80	-9.10	-2.16	0.76		
25.0	3958.	6000.	-3.30	-8.10	-1.97	0.96		

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2735

DATE 07/09/76 TIME 11:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	2042.	-0.0	2.6	2.6	180.
0.5	76.	2118.	0.1	2.6	2.6	182.
1.0	152.	2194.	-0.5	2.4	2.5	167.
1.5	229.	2271.	-0.2	1.7	1.7	172.
2.0	305.	2347.	0.0	1.4	1.4	181.
2.5	381.	2423.	-1.1	3.0	3.2	161.
3.0	457.	2499.	-0.2	2.8	2.8	175.
3.5	535.	2577.	-0.9	3.2	3.3	164.
4.0	625.	2667.	-0.3	3.3	3.3	174.
4.5	716.	2758.	1.2	1.5	1.9	220.
5.0	796.	2838.	1.4	1.9	2.4	217.
5.5	873.	2915.	1.5	0.6	1.7	250.
6.0	949.	2991.	2.9	0.7	3.0	255.
6.5	1025.	3067.	2.4	1.6	2.9	236.
7.0	1108.	3150.	3.2	1.6	3.6	243.
7.5	1193.	3235.	4.6	0.7	4.6	261.
8.0	1269.	3311.	5.5	-0.5	5.5	275.
8.5	1347.	3389.	4.6	-0.7	4.7	279.
9.0	1435.	3477.	4.8	-0.7	4.9	278.
9.5	1519.	3561.	4.9	-0.1	4.9	271.
10.0	1597.	3639.	3.9	0.4	3.9	264.
10.5	1673.	3715.	4.8	1.0	4.9	258.
11.0	1749.	3791.	3.7	1.4	4.0	250.
11.5	1825.	3867.	4.6	1.1	4.7	256.
12.0	1901.	3943.	4.2	0.8	4.3	260.

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2732

TE 07/11/76 TIME 0645MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		22.30		0.0		0.5	180.
1.0	150	2192	21.70	-0.60	-1.38	1.55	1.3	283.
2.0	300	2342	20.90	-0.80	-1.38	1.55	1.3	153.
3.0	458.	2500.	19.80	-1.00	-1.38	1.55	5.1	152.
3.3	500	2542	19.81	-0.09	-1.38	1.55	3.9	157.
6.3	958.	3000.	17.40	-2.39	-1.57	1.35	4.1	177.
12.8	1958.	4000.	11.40	-6.01	-1.77	1.16	M	M
19.3	2958.	5000.	4.21	-7.20	-2.56	0.37	M	M

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2732

TE 07/11/76 TIME 0645MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	2042.	-0.0	0.5	0.5	180.
0.5	76.	2118.	0.8	-0.6	1.0	305.
1.0	152.	2194.	1.3	-0.3	1.3	282.
1.5	229.	2271.	0.3	0.9	1.0	199.
2.0	305.	2347.	-0.6	1.1	1.3	150.
2.5	381.	2423.	-0.5	1.5	1.6	162.
3.0	457.	2499.	-2.4	4.5	5.1	151.
3.5	533.	2575.	-1.0	2.9	3.0	162.
4.0	610.	2652.	-0.9	3.4	3.5	165.
4.5	686.	2728.	-0.6	3.2	3.2	169.
5.0	762.	2804.	-0.5	2.9	2.9	170.
5.5	838.	2880.	-0.5	3.4	3.5	172.
6.0	914.	2956.	-0.5	3.8	3.8	172.
6.5	991.	3033.	0.1	4.3	4.3	181.
7.0	1067.	3109.	-0.0	4.3	4.3	180.
7.5	1143.	3185.	-0.3	4.6	4.6	176.
8.0	1219.	3261.	-0.7	4.8	4.8	172.
8.5	1295.	3337.	-0.8	5.3	5.4	171.
9.0	1372.	3414.	-0.5	5.3	5.3	174.
9.5	1448.	3490.	-0.5	5.0	5.0	175.
10.0	1524.	3566.	-0.5	5.0	5.1	174.
10.5	1600.	3642.	-0.6	6.6	6.6	175.
11.0	1678.	3720.	-0.5	6.4	6.4	175.
11.5	1754.	3796.	0.1	5.2	5.2	181.
12.0	1831.	3873.	-0.8	4.6	4.6	170.

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2724

ATE 07/11/76 TIME 1130MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		26.00		0.0		1.5	180.
1.0	150	2192	25.30	-0.70	-1.38	1.55	1.9	211.
2.0	300	2342	24.70	-0.60	-2.16	0.76	2.8	209.
3.0	458.	2500.	23.00	-1.69	-3.94	-1.01	1.8	182.
3.2	500	2542	22.71	-0.30	-3.94	-1.01	2.2	154.
5.4	958.	3000.	17.80	-4.88	-4.33	-1.40	2.8	149.
7.5	*1481	3523	13.00		-1.38	1.55		
10.6	1958.	4000.	11.80	-5.92	-2.16	0.76	5.6	150.
16.6	2958.	5000.	2.80	-9.10	-2.76	0.17	M	M
23.2	3958.	6000.	-3.40	-6.20	-1.77	1.16	M	M

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2724

ATE 07/11/76 TIME 1130MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	2042.	-0.0	1.5	1.5	180.
0.5	76.	2118.	0.1	-0.7	0.7	351.
1.0	152.	2194.	0.9	1.8	2.0	206.
1.5	229.	2271.	1.4	2.2	2.7	212.
2.0	305.	2347.	1.4	2.4	2.8	209.
2.5	381.	2423.	1.7	2.2	2.8	219.
3.0	463.	2505.	-0.0	1.7	1.7	179.
3.5	563.	2605.	-2.9	1.0	3.1	110.
4.0	668.	2710.	-3.1	1.0	3.2	108.
4.5	768.	2810.	-2.4	1.3	2.7	118.
5.0	863.	2905.	-2.4	1.1	2.7	115.
5.5	986.	3028.	-1.0	2.6	2.8	159.
6.0	1113.	3155.	-0.6	1.3	1.4	156.
6.5	1256.	3298.	0.1	2.6	2.6	182.
7.0	1396.	3438.	0.1	2.8	2.8	181.
7.5	1481.	3523.	-1.2	2.0	2.3	149.
8.0	1558.	3600.	-0.8	2.0	2.2	157.
8.5	1634.	3676.	-3.4	4.5	5.6	143.
9.0	1710.	3752.	-3.4	4.4	5.5	142.
9.5	1786.	3828.	-3.2	5.2	6.1	149.
10.0	1862.	3904.	-2.5	4.3	5.0	150.
10.5	1939.	3981.	-2.6	4.7	5.3	151.
11.0	2015.	4057.	-3.4	5.5	6.5	148.
11.5	2091.	4133.	-1.9	5.0	5.4	159.
12.0	2167.	4209.	-1.7	5.5	5.8	163.

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2736

TE 07/13/76 TIME 12:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		24.20		0.0		3.1	360.
0.9	150	2192	22.35	-1.85	-3.90	-1.01	4.6	313.
1.5	300	2342	20.32	-2.04	-5.90	-2.98	5.6	285.
2.1	458.	2500.	18.00	-1.44	-6.80	-3.96	5.2	300.
2.2	500	2542	18.11	-0.77	-6.80	-3.96	3.6	304.
3.8	958.	3000.	14.00	-4.10	-2.36	0.57	2.2	247.
10.0	1958.	4000.	6.20	-7.81	-1.77	1.16	3.6	316.
16.2	2958.	5000.	-1.80	-8.00	-0.50	2.38		
22.7	3958.	6000.	-6.80	-5.00	-2.95	-0.02		

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2736

TE 07/13/76 TIME 12:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	2042.	0.0	-3.1	3.1	360.
0.5	76.	2118.	2.3	-3.0	3.8	322.
1.0	174.	2216.	3.8	-3.1	4.9	310.
1.5	286.	2328.	5.3	-1.3	5.5	283.
2.0	426.	2468.	5.7	-2.9	6.4	297.
2.5	576.	2618.	0.6	-0.5	0.8	311.
3.0	739.	2781.	-1.0	-2.0	2.2	27.
3.5	886.	2930.	-0.8	-3.0	3.1	15.
4.0	991.	3033.	0.1	-1.8	1.8	357.
4.5	1067.	3109.	0.5	-1.0	1.1	331.
5.0	1143.	3185.	0.6	-1.1	1.3	331.
5.5	1220.	3262.	0.8	-1.4	1.6	330.
6.0	1303.	3345.	-0.4	-2.4	2.4	9.
6.5	1395.	3437.	0.8	-1.9	2.1	338.
7.0	1476.	3518.	-0.2	-1.9	1.9	7.
7.5	1554.	3596.	2.2	-2.3	3.2	316.
8.0	1641.	3683.	2.3	-2.9	3.7	322.
8.5	1736.	3778.	4.7	-3.8	6.1	309.
9.0	1812.	3854.	2.7	-2.4	3.6	311.
9.5	1889.	3931.	2.8	-2.8	4.0	315.
10.0	1965.	4007.	2.5	-2.6	3.6	316.
10.5	2041.	4083.	2.9	-3.0	4.2	316.
11.0	2117.	4159.	3.8	-2.8	4.7	306.
11.5	2193.	4235.	3.2	-3.0	4.4	314.
12.0	2270.	4312.	1.8	-0.9	2.0	298.

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2730

ATE 07/15/76 TIME 06:45MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		17.21		0.0		0.5	315.
1.0	150	2192	16.77	-0.45	-0.35	2.58	2.9	293.
2.0	300	2342	16.95	0.18	0.18	3.10	1.5	288.
3.0	458.	2500.	16.95	0.0	-0.18	2.75	1.1	342.
3.3	500	2542	16.95	0.0	-0.18	2.75	1.4	341.
6.3	958.	3000.	15.42	-1.52	-1.78	1.15	4.7	217.
12.8	1958.	4000.	8.64	-6.79	-2.20	0.73	M	M
19.2	2958.	5000.	0.24	-8.40	-3.39	-0.47	M	M

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2730

ATE 07/15/76 TIME 06:45MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	2042.	0.4	-0.4	0.5	315.
0.5	76.	2118.	2.6	-1.0	2.8	292.
1.0	152.	2194.	2.7	-1.1	2.9	293.
1.5	229.	2271.	2.4	-0.7	2.5	287.
2.0	305.	2347.	1.4	-0.4	1.4	288.
2.5	381.	2423.	0.4	-0.9	1.0	337.
3.0	457.	2499.	0.3	-1.1	1.1	342.
3.5	533.	2575.	0.5	-1.5	1.5	340.
4.0	610.	2652.	-0.7	-1.6	1.7	23.
4.5	686.	2728.	-0.9	-1.0	1.4	41.
5.0	762.	2804.	-1.4	-1.1	1.8	52.
5.5	838.	2880.	-2.7	-2.2	3.5	51.
6.0	914.	2956.	-0.8	-1.5	1.7	29.
6.5	991.	3033.	0.3	-7.0	7.0	358.
7.0	1067.	3109.	-4.6	-5.2	6.9	41.
7.5	1143.	3185.	-1.2	-6.3	6.4	10.
8.0	1219.	3261.	-1.2	-5.5	5.6	12.
8.5	1295.	3337.	-1.5	-4.9	5.1	17.
9.0	1372.	3414.	-0.9	-4.8	4.9	10.
9.5	1448.	3490.	-0.4	-3.3	3.3	6.
10.0	1525.	3567.	-1.7	-4.0	4.3	23.
10.5	1601.	3643.	0.2	-3.8	3.8	357.
11.0	1677.	3719.	-0.7	-3.8	3.9	10.
11.5	1753.	3795.	-0.3	-3.0	3.1	6.
12.0	1830.	3872.	0.5	-3.4	3.5	352.

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2728

E 07/15/76 TIME 11:30MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

IME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		20.64		0.0		3.1	270.
1.0	150	2192	19.40	-1.24	-1.23	1.70	3.5	282.
2.0	300	2342	18.86	-0.54	-1.23	1.69	2.0	333.
3.0	458.	2500.	17.69	-0.98	-1.42	1.51	3.6	334.
3.3	500	2542	17.70	-0.18	-1.42	1.51	3.7	149.
6.3	958.	3000.	15.24	-2.46	-1.98	0.95	4.7	26.
9.8	1958.	4000.	8.96	-6.28	-1.47	1.46	M	M
9.3	2958.	5000.	0.90	-8.06	-2.46	0.47	M	M

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2728

E 07/15/76 TIME 11:30MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

IME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	2042.	3.1	0.0	3.1	270.
0.5	76.	2118.	2.6	0.5	2.6	260.
1.0	152.	2194.	3.5	-0.8	3.5	283.
1.5	229.	2271.	1.5	-1.5	2.2	315.
2.0	305.	2347.	0.9	-1.8	2.0	334.
2.5	381.	2423.	2.2	-2.7	3.5	321.
3.0	457.	2499.	1.4	-3.3	3.6	338.
3.5	533.	2575.	-0.1	-3.8	3.8	1.
4.0	610.	2652.	-0.3	-3.4	3.4	6.
4.5	686.	2728.	-1.2	-4.1	4.3	16.
5.0	762.	2804.	-4.2	-6.7	7.9	32.
5.5	838.	2880.	-2.0	-5.0	5.3	22.
6.0	914.	2956.	-2.0	-4.4	4.8	25.
6.5	991.	3033.	-2.1	-4.2	4.7	27.
7.0	1067.	3109.	-2.0	-3.6	4.1	29.
7.5	1143.	3185.	-2.3	-3.8	4.4	31.
8.0	1219.	3261.	-1.6	-2.5	3.0	32.
8.5	1295.	3337.	-1.1	-2.5	2.7	23.
9.0	1372.	3414.	-0.7	-2.3	2.4	17.
9.5	1448.	3490.	-0.1	-1.9	1.9	2.
0.0	1524.	3566.	-0.0	-2.4	2.4	0.
0.5	1600.	3642.	0.3	-2.2	2.2	353.
1.0	1676.	3718.	-0.3	-2.7	2.8	7.
1.5	1753.	3795.	1.6	-3.2	3.5	334.
2.0	1829.	3871.	1.2	-3.9	4.0	343.

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2799

TE 07/17/76 TIME 06:30MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		21.70		0.0		0.0	0.
0.5	* 76	2118	21.79		-3.90	-1.06		
0.8	150	2192	19.82	-1.88	-6.26	-3.33	2.6	284.
1.4	300	2342	18.65	-1.17	-3.85	-0.93	0.9	319.
2.1	458.	2500.	15.92	-1.76	-6.03	-3.10	0.7	297.
2.2	500	2542	16.02	-0.87	-6.03	-3.10	0.9	281.
3.9	958.	3000.	11.91	-4.10	-5.23	-2.31	1.2	200.
10.0	1958.	4000.					1.4	192.

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2799

TE 07/17/76 TIME 06:30MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	2042.	0.0	0.0	0.0	0.
0.5	76.	2118.	2.6	-1.0	2.8	291.
1.0	191.	2233.	2.4	-0.4	2.5	280.
1.5	324.	2366.	0.3	-0.5	0.6	328.
2.0	433.	2475.	0.4	-0.3	0.5	307.
2.5	567.	2609.	1.3	0.3	1.3	256.
3.0	716.	2758.	1.8	0.2	1.8	264.
3.5	848.	2890.	0.6	1.0	1.1	211.
4.0	985.	3027.	0.4	1.1	1.2	198.
4.5	1105.	3147.	0.0	0.6	0.6	184.
5.0	1189.	3231.	1.6	0.8	1.8	244.
5.5	1265.	3307.	0.4	0.5	0.7	219.
6.0	1341.	3383.	1.1	0.1	1.1	264.
6.5	1417.	3459.	0.2	0.6	0.6	202.
7.0	1494.	3536.	0.1	0.4	0.4	202.
7.5	1570.	3612.	0.7	1.2	1.4	210.
8.0	1646.	3688.	0.2	0.6	0.7	197.
8.5	1722.	3764.	-0.3	0.8	0.9	158.
9.0	1798.	3840.	0.4	0.9	1.0	207.
9.5	1875.	3917.	-0.1	1.2	1.2	173.
10.0	1951.	3993.	0.3	1.3	1.4	194.
10.5	2027.	4069.	0.1	2.0	2.0	182.
11.0	2103.	4145.	0.2	1.6	1.6	186.
11.5	2179.	4221.	0.0	2.2	2.2	181.
12.0	2256.	4298.	-0.2	1.5	1.5	173.
12.5	2332.	4374.	0.3	1.6	1.6	191.

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2727

DATE 07/17/76 TIME 12:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		24.31		0.0		M	M
0.8	150	2192	22.09	-2.22	-3.44	-0.51	3.2	222.
1.6	300	2342	20.47	-1.62	-5.22	-2.30	1.4	238.
2.3	458.	2500.	18.61	-1.14	-4.90	-1.98	2.0	224.
2.4	500	2542	18.63	-0.69	-4.90	-1.98	1.8	224.
4.0	958.	3000.	12.83	-5.03	-5.95	-3.02	1.3	262.
9.3	1958.	4000.	5.11	-8.48	-3.71	-0.79	3.5	141.

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2727

DATE 07/17/76 TIME 12:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
			THE WIND DATA ARE MISSING			
0.5	76.	2118.	1.7	2.0	2.6	221.
1.0	183.	2225.	2.3	2.6	3.4	222.
1.5	284.	2326.	1.1	0.6	1.3	240.
2.0	394.	2436.	1.7	1.7	2.4	224.
2.5	520.	2562.	1.2	1.2	1.7	225.
3.0	649.	2691.	1.7	1.1	2.1	237.
3.5	791.	2833.	1.7	0.3	1.7	258.
4.0	951.	2993.	1.3	0.1	1.3	267.
4.5	1101.	3143.	-0.2	0.6	0.6	159.
5.0	1239.	3281.	4.0	4.9	6.3	219.
5.5	1349.	3391.	2.8	3.6	4.5	218.
6.0	1427.	3469.	-1.1	1.7	2.0	146.
6.5	1503.	3545.	-0.6	0.7	0.9	141.
7.0	1579.	3621.	-1.5	1.1	1.8	125.
7.5	1655.	3697.	-0.5	1.6	1.6	161.
8.0	1731.	3773.	-0.5	1.5	1.6	161.
8.5	1812.	3854.	-1.0	2.2	2.4	156.
9.0	1898.	3940.	-2.3	4.3	4.8	152.
9.5	1995.	4037.	-2.0	1.9	2.7	134.
10.0	2084.	4126.	-1.1	1.9	2.2	151.
10.5	2161.	4203.	-1.6	1.6	2.3	136.
11.0	2237.	4279.	-1.4	0.4	1.4	106.
11.5	2315.	4357.	-2.2	3.2	3.9	146.
12.0	2396.	4438.	-2.0	3.9	4.4	153.

COL CB TRACT ELEV 2042 METERS SOUNDING ID 1424

07/19/76 TIME 0630MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

ME IN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		14.10		0.0		0.0	0.
.0	150	2192	13.47	-0.63	-0.18	2.75	0.9	309.
.0	300	2342	12.74	-0.73	-2.88	0.05	1.2	303.
.0	458.	2500.	11.27	-1.24	-2.35	0.57	1.4	309.
.3	500	2542	11.28	-0.22	-2.35	0.57	1.3	306.
.3	958.	3000.	8.58	-2.68	-2.20	0.73	1.1	276.
.6	1958.	4000.	1.02	-7.26	-5.08	-2.15	2.3	238.
.4	2958.	5000.	-7.12	-8.45	0.0	2.93	M	M

COL CB TRACT ELEV 2042 METERS SOUNDING ID 1424

07/19/76 TIME 0630MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

ME IN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
.0	0.	2042.	0.0	0.0	0.0	0.
.5	76.	2118.	0.7	-0.3	0.8	295.
.0	152.	2194.	0.7	-0.6	0.9	310.
.5	229.	2271.	0.9	-0.5	1.1	299.
.0	305.	2347.	1.0	-0.7	1.2	303.
.5	381.	2423.	1.0	-0.7	1.2	307.
.0	457.	2499.	1.1	-0.9	1.4	309.
.5	533.	2575.	1.1	-0.7	1.3	304.
.0	610.	2652.	1.0	-0.6	1.1	303.
.5	686.	2728.	1.4	-0.3	1.5	284.
.0	762.	2804.	1.0	-0.4	1.1	293.
.5	839.	2881.	1.3	-0.3	1.4	281.
.0	916.	2958.	1.1	-0.2	1.1	280.
.5	992.	3034.	1.2	-0.0	1.2	272.
.0	1072.	3114.	1.9	1.0	2.2	244.
.5	1148.	3190.	2.0	1.5	2.5	233.
.0	1224.	3266.	2.1	-0.1	2.1	272.
.5	1300.	3342.	2.5	2.0	3.2	232.
.0	1377.	3419.	2.9	1.4	3.2	245.
.5	1453.	3495.	2.4	0.8	2.5	250.
.0	1531.	3573.	2.8	1.0	2.9	251.
.5	1637.	3679.	3.3	1.6	3.7	244.
.0	1716.	3758.	3.0	1.7	3.4	241.
.5	1792.	3834.	2.2	2.2	3.1	225.
.0	1868.	3910.	1.6	2.2	2.7	215.
.5	1947.	3989.	1.7	0.8	1.9	244.
.0	2044.	4086.	1.1	4.6	4.8	194.
.5	2147.	4189.	1.5	3.0	3.3	207.
.0	2223.	4265.	0.8	4.3	4.3	191.
.5	2299.	4341.	1.4	3.2	3.5	204.

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2309

DATE 07/19/76 TIME 12:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		21.44		0.0		0.0	0.
0.8	150	2192	19.22	-2.22	-3.67	-0.74	0.9	276.
1.6	300	2342	17.77	-1.45	-3.35	-0.42	1.2	249.
2.6	458.	2500.	16.01	-1.30	-2.31	0.62	1.7	250.
2.9	500	2542	16.03	-0.44	-2.31	0.62	1.5	249.
5.8	958.	3000.	12.83	-3.20	-0.90	2.03	1.2	212.
11.5	*1858	3900	7.46		-3.14	-0.21		
12.1	1958.	4000.	5.39	-7.06	-2.97	-0.04	3.5	238.
18.3	2958.	5000.	-1.86	-7.63	-1.90	1.03		

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2309

DATE 07/19/76 TIME 12:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	2042.	0.0	0.0	0.0	0.
0.5	76.	2118.	0.6	-0.1	0.6	280.
1.0	191.	2233.	1.1	-0.1	1.1	274.
1.5	282.	2324.	1.2	0.4	1.2	249.
2.0	365.	2407.	1.0	0.4	1.1	247.
2.5	446.	2488.	1.7	0.6	1.8	250.
3.0	522.	2564.	1.2	0.5	1.3	249.
3.5	598.	2640.	1.6	0.7	1.8	248.
4.0	677.	2719.	1.5	0.9	1.7	239.
4.5	753.	2795.	1.0	1.0	1.4	227.
5.0	832.	2874.	0.6	1.0	1.2	209.
5.5	908.	2950.	0.4	1.1	1.1	201.
6.0	985.	3027.	0.8	1.0	1.3	219.
6.5	1061.	3103.	1.1	1.4	1.8	216.
7.0	1137.	3179.	1.3	2.0	2.4	213.
7.5	1213.	3255.	1.2	1.2	1.7	226.
8.0	1297.	3339.	1.6	1.5	2.2	227.
8.5	1392.	3434.	2.7	2.1	3.4	231.
9.0	1474.	3516.	2.1	1.6	2.7	234.
9.5	1550.	3592.	1.9	1.5	2.5	232.
10.0	1630.	3672.	2.2	1.4	2.7	238.
10.5	1707.	3749.	2.4	1.8	3.0	233.
11.0	1783.	3825.	2.0	1.5	2.5	233.
11.5	1859.	3901.	2.5	1.9	3.1	235.
12.0	1939.	3981.	2.9	1.9	3.5	237.
12.5	2038.	4080.	3.1	1.8	3.6	240.

COL CR TRACT ELEV 2042 METERS SOUNDING ID 2063

E 07/21/76 TIME 06:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

IME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		16.45		0.0		0.0	0.
1.0	150	2192	15.83	-0.62	-2.30	0.63	1.6	248.
2.0	300	2342	14.65	-1.18	-2.49	0.44	1.6	245.
3.0	458.	2500.	12.83	-1.71	-1.26	1.67	0.7	197.
3.3	500	2542	12.84	-0.10	-1.26	1.67	0.6	171.
5.3	958.	3000.	9.81	-3.03	-1.82	1.11	0.8	197.

COL CR TRACT ELEV 2042 METERS SOUNDING ID 2063

E 07/21/76 TIME 06:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

IME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	2042.	0.0	0.0	0.0	0.
0.5	76.	2118.	1.0	0.5	1.1	242.
.0	152.	2194.	1.5	0.6	1.6	248.
.5	229.	2271.	1.4	0.6	1.5	245.
.0	305.	2347.	1.4	0.6	1.6	245.
.5	381.	2423.	0.4	0.7	0.9	210.
.0	458.	2500.	0.2	0.7	0.7	197.
.5	534.	2576.	-0.3	0.5	0.6	151.
.0	610.	2652.	0.5	0.6	0.8	216.
.5	686.	2728.	0.3	0.5	0.6	216.
.0	762.	2804.	1.5	-0.2	1.5	277.
.5	839.	2881.	0.9	0.1	0.9	266.
.0	915.	2957.	-0.1	0.3	0.4	164.
.5	991.	3033.	0.8	0.9	1.2	223.
.0	1067.	3109.	1.2	-0.3	1.2	283.
.5	1143.	3185.	0.8	-0.1	0.8	276.
.0	1220.	3262.	1.2	0.2	1.2	261.
.5	1296.	3338.	-0.0	0.2	0.2	175.
.0	1372.	3414.	0.1	0.3	0.3	201.
.5	1448.	3490.	0.4	-0.2	0.4	301.
.0	1524.	3566.	0.5	-0.2	0.5	287.
.5	1602.	3644.	0.7	-0.6	0.9	307.
.0	1678.	3720.	1.2	-0.3	1.3	282.
.5	1755.	3797.	1.6	-0.2	1.6	278.
.0	1831.	3873.	1.9	-0.1	1.9	274.

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2312

TE 07/21/76 TIME 12:00MST - ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		23.53		0.0		0.0	0.
0.9	150	2192	21.31	-2.22	-2.60	0.33	1.9	50.
1.8	300	2342	19.56	-1.75	-3.66	-0.74	1.7	25.
2.6	458.	?2500.	18.27	-1.30	-3.34	-0.42	1.6	36.
2.9	? 500	2542	17.74	-0.53	-3.34	-0.42	1.6	31.
5.7	958.	?3000.	13.74	-3.99	-3.06	-0.13	2.3	173.
11.9	1958.	4000.	3.79	-9.95	-2.43	0.50	2.0	305.

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2312

TE 07/21/76 TIME 12:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	2042.	0.0	0.0	0.0	0.
0.5	76.	2118.	-1.5	-0.4	1.6	74.
1.0	177.	2219.	-1.3	-1.5	2.0	41.
1.5	254.	2296.	-0.5	-1.6	1.7	18.
2.0	343.	2385.	-0.9	-1.5	1.8	30.
2.5	434.	2476.	-1.0	-1.3	1.6	39.
3.0	521.	2563.	-0.8	-1.4	1.6	28.
3.5	606.	2648.	0.1	-1.6	1.6	357.
4.0	682.	2724.	0.4	-1.1	1.1	342.
4.5	758.	2800.	0.1	-1.3	1.3	355.
5.0	842.	2884.	0.4	-1.0	1.1	337.
5.5	921.	2963.	-0.0	-2.0	2.0	1.
6.0	997.	3039.	0.2	-2.6	2.6	356.
6.5	1077.	3119.	0.2	-2.1	2.1	354.
7.0	1153.	3195.	0.8	-1.9	2.1	336.
7.5	1230.	3272.	1.5	-0.6	1.6	292.
8.0	1308.	3350.	1.2	-0.6	1.4	297.
8.5	1386.	3428.	1.9	-0.0	1.9	271.
9.0	1463.	3505.	1.1	-0.3	1.1	283.
9.5	1539.	3581.	2.1	-0.4	2.1	281.
10.0	1615.	3657.	1.4	0.2	1.4	260.
10.5	1693.	3735.	1.0	-1.4	1.7	323.
11.0	1778.	3820.	1.4	-1.5	2.0	317.
11.5	1889.	3931.	0.7	-0.7	1.0	314.
12.0	1977.	4019.	1.9	-1.2	2.3	303.

COL CB TRACT ELEV 2042 METERS SOUNDING ID 1746

ATE 07/23/76 TIME 06:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		18.43		0.0		0.0	0.
1.0	150	2192	17.36	-1.07	-3.53	-0.60	1.8	140.
1.9	300	2342	16.20	-1.17	-1.95	0.98	1.9	135.
3.0	458.	2500.	15.10	-1.09	-1.25	1.68	1.6	120.
3.2	500	2542	14.92	-0.18	-0.89	2.04	1.9	127.
6.2	958.	3000.	12.37	-2.19	-1.98	0.94	3.5	146.
12.8	1958.	4000.	5.12	-7.62	-2.79	0.14	M	M
19.3	2958.	5000.	-2.05	-7.17	-1.52	1.41	M	M

COL CB TRACT ELEV 2042 METERS SOUNDING ID 1746

ATE 07/23/76 TIME 06:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	2042.	0.0	0.0	0.0	0.
0.5	76.	2118.	-0.8	1.2	1.5	147.
1.0	152.	2194.	-1.1	1.4	1.8	140.
1.5	235.	2277.	-1.3	1.7	2.2	142.
2.0	311.	2353.	-1.4	1.3	1.9	134.
2.5	388.	2430.	-1.2	1.0	1.6	129.
3.0	464.	2506.	-1.4	0.8	1.6	119.
3.5	540.	2582.	-1.5	1.6	2.2	136.
4.0	616.	2658.	-1.7	1.6	2.4	134.
4.5	692.	2734.	-1.8	1.8	2.5	135.
5.0	769.	2811.	-2.2	2.2	3.1	135.
5.5	845.	2887.	-1.8	2.2	2.8	141.
6.0	921.	2963.	-1.7	2.6	3.1	147.
6.5	997.	3039.	-2.3	3.2	4.0	144.
7.0	1073.	3115.	-1.9	3.1	3.6	148.
7.5	1150.	3192.	-2.1	2.5	3.3	140.
8.0	1226.	3268.	-1.9	2.3	3.0	141.
8.5	1302.	3344.	-1.9	1.7	2.5	133.
9.0	1378.	3420.	-1.8	1.6	2.4	131.
9.5	1454.	3496.	-1.8	1.5	2.3	130.
10.0	1532.	3574.	-1.9	1.5	2.4	128.
10.5	1612.	3654.	-2.1	1.1	2.4	118.
11.0	1688.	3730.	-2.2	0.5	2.3	102.
11.5	1764.	3806.	-2.1	1.4	2.5	124.
12.0	1841.	3883.	-3.2	1.1	3.4	109.

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2216

ATE 07/23/76 TIME 12:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		22.84		0.0		0.0	0.
1.0	150	2192	21.88	-0.96	-1.03	1.89	2.1	88.
2.0	300	2342	21.00	-0.88	-2.94	-0.02	1.6	87.
3.0	458.	2500.	19.14	-1.58	-1.99	1.00	1.7	88.
3.3	500	2542	19.16	-0.26	-1.99	1.00	2.3	93.
6.3	958.	3000.	15.74	-3.41	-2.31	0.62	2.3	80.
12.8	1958.	4000.	9.05	-6.70	-1.65	1.28	M	M

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2216

ATE 07/23/76 TIME 12:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	2042.	0.0	0.0	0.0	0.
0.5	76.	2118.	-2.0	-0.1	2.0	86.
1.0	152.	2194.	-2.1	-0.1	2.1	88.
1.5	229.	2271.	-1.8	-0.1	1.8	87.
2.0	305.	2347.	-1.6	-0.1	1.6	87.
2.5	381.	2423.	-2.3	0.2	2.3	95.
3.0	457.	2499.	-1.7	-0.1	1.7	88.
3.5	533.	2575.	-2.7	0.3	2.7	97.
4.0	610.	2652.	-3.4	-0.2	3.4	87.
4.5	686.	2728.	-3.4	0.3	3.4	95.
5.0	762.	2804.	-3.2	0.3	3.2	95.
5.5	838.	2880.	-2.5	-0.1	2.5	87.
6.0	914.	2956.	-3.3	0.0	3.3	91.
6.5	991.	3033.	-1.5	-0.5	1.6	72.
7.0	1067.	3109.	-2.2	-0.7	2.3	73.
7.5	1143.	3185.	-2.3	-0.6	2.3	75.
8.0	1219.	3261.	-0.8	-2.2	2.4	20.
8.5	1295.	3337.	-0.9	-2.6	2.7	19.
9.0	1372.	3414.	-1.2	-1.9	2.3	32.
9.5	1448.	3490.	-1.2	-2.5	2.8	26.
10.0	1524.	3566.	-1.6	-1.8	2.4	41.
10.5	1600.	3642.	-1.7	-1.8	2.5	44.
11.0	1676.	3718.	-1.3	-2.4	2.7	28.
11.5	1753.	3795.	-1.3	-1.7	2.1	38.
12.0	1829.	3871.	-0.6	-1.3	1.4	26.

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2310

TE 07/25/76 TIME 06:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		17.57		0.0		5.1	315.
1.0	150	2192	16.35	-1.22	-2.94	-0.01	2.5	252.
1.8	300	2342	14.24	-2.12	-5.07	-2.14	4.0	254.
2.4	458.	2500.	12.80	-1.41	-5.10	-2.17	5.2	254.
2.6	500	2542	12.39	-0.44	-4.42	-1.50	5.5	255.
4.5	958.	3000.	8.19	-4.20	-3.96	-1.03	6.1	268.
10.4	1958.	4000.	0.77	-7.43	0.56	3.48	1.2	246.
16.9	2958.	5000.	-3.59	-4.36	-0.94	1.99	M	M

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2310

TE 07/25/76 TIME 06:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	2042.	3.6	-3.6	5.1	315.
0.5	76.	2118.	3.2	0.3	3.2	265.
1.0	152.	2194.	2.4	0.8	2.5	252.
1.5	239.	2281.	3.1	0.9	3.2	254.
2.0	356.	2398.	4.6	1.3	4.8	254.
2.5	481.	2523.	5.0	1.5	5.3	254.
3.0	606.	2648.	6.5	0.9	6.6	262.
3.5	721.	2763.	5.6	0.1	5.6	269.
4.0	836.	2878.	5.0	-0.1	5.0	271.
4.5	964.	3006.	6.1	0.2	6.1	268.
5.0	1057.	3099.	3.5	-0.1	3.5	272.
5.5	1139.	3181.	1.8	-0.3	1.8	278.
6.0	1215.	3257.	1.3	-0.4	1.4	289.
6.5	1291.	3333.	1.7	-0.4	1.7	285.
7.0	1368.	3410.	2.9	0.6	3.0	258.
7.5	1454.	3496.	3.9	0.8	4.0	259.
8.0	1563.	3605.	2.9	0.7	3.0	256.
8.5	1654.	3696.	0.8	0.7	1.1	227.
9.0	1739.	3781.	0.0	0.2	0.2	191.
9.5	1815.	3857.	2.7	0.0	2.7	270.
0.0	1891.	3933.	0.1	-0.1	0.1	331.
0.5	1968.	4010.	1.1	0.8	1.4	233.
1.0	2044.	4086.	0.1	0.9	0.9	185.
1.5	2120.	4162.	0.9	0.6	1.1	236.
2.0	2196.	4238.	-0.0	0.1	0.1	176.

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2317

E 07/25/76 TIME 12:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

IME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		21.52		0.0		5.1	225.
1.0	150	2192	20.39	-1.14	-3.48	-0.55	2.5	183.
1.8	300	2342	18.48	-1.90	-3.84	-0.91	3.4	193.
2.6	458.	2500.					3.5	204.
2.8	500	2542					3.4	201.
5.2	958.	3000.					1.1	179.
0.3	1958.	4000.					1.8	284.

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2317

E 07/25/76 TIME 12:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

IME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	2042.	3.6	3.6	5.1	225.
0.5	76.	2118.	-0.0	2.3	2.3	179.
1.0	152.	2194.	0.1	2.5	2.5	183.
1.5	245.	2287.	0.3	2.4	2.4	186.
2.0	343.	2385.	1.2	3.9	4.1	197.
2.5	440.	2482.	1.5	3.3	3.6	205.
3.0	538.	2580.	1.0	3.1	3.3	198.
3.5	635.	2677.	0.1	1.8	1.8	184.
4.0	733.	2775.	0.2	1.9	1.9	186.
4.5	831.	2873.	0.1	1.7	1.7	182.
5.0	928.	2970.	-0.0	1.1	1.1	178.
5.5	1026.	3068.	0.0	1.0	1.0	180.
6.0	1123.	3165.	0.2	0.9	0.9	193.
6.5	1221.	3263.	-0.1	1.3	1.3	177.
7.0	1318.	3360.	-0.4	0.1	0.4	103.
7.5	1416.	3458.	-0.1	1.9	1.9	176.
8.0	1514.	3556.	0.3	0.4	0.5	217.
8.5	1611.	3653.	0.5	0.3	0.6	235.
9.0	1709.	3751.	0.9	0.3	1.0	251.
9.5	1806.	3848.	1.2	0.2	1.2	263.
0.0	1904.	3946.	2.5	-0.5	2.6	282.
0.5	2001.	4043.	1.1	-0.3	1.1	286.
1.0	2099.	4141.	1.0	-0.1	1.0	278.
1.5	2197.	4239.	1.0	-0.3	1.1	286.
2.0	2294.	4336.	2.3	-0.7	2.4	288.
2.5	2392.	4434.	1.7	-0.7	1.8	292.
3.0	2489.	4531.	1.5	0.0	1.5	269.
3.5	2587.	4629.	2.7	-0.8	2.8	287.
4.0	2684.	4726.	3.6	-2.1	4.2	300.
4.5	2782.	4824.	2.2	-0.2	2.3	275.

COL CR TRACT ELEV 2042 METERS SOUNDING ID 2739

TE 07/01/76 TIME 06:00MST ASCENT RATE 600 FPM DATA INTERVAL 15 SEC.

THERE ARE NO INVERSION BASES WITHIN 0M OF THE SFC

LAYER BASE METERS AGL	LAYER TOP METERS AGL	DT/DZ (DEG C)/100M
0.	100.	-2.88
100.	250.	-0.76
250.	500.	-1.07
500.	750.	-0.89
750.	1000.	-1.08
1000.	1500.	-0.83

COL CR TRACT ELEV 2042 METERS SOUNDING ID 2738

TE 07/03/76 TIME 06:00MST ASCENT RATE 600 FPM DATA INTERVAL 15 SEC.

THERE ARE NO INVERSION BASES WITHIN 1500M OF THE SFC

LAYER BASE METERS AGL	LAYER TOP METERS AGL	DT/DZ (DEG C)/100M
0.	100.	-0.88
100.	250.	-0.81
250.	500.	-0.79
500.	750.	-0.91
750.	1000.	-0.73
1000.	1500.	-0.88

COL CR TRACT ELEV 2042 METERS SOUNDING ID 2735

TE 07/03/76 TIME 12:30MST ASCENT RATE 600 FPM DATA INTERVAL 15 SEC.

THERE ARE NO INVERSION BASES WITHIN 1500M OF THE SFC

LAYER BASE METERS AGL	LAYER TOP METERS AGL	DT/DZ (DEG C)/100M
0.	100.	-0.59
100.	250.	-1.00
250.	500.	-1.09
500.	750.	-0.75
750.	1000.	-0.06
1000.	1500.	-0.87

COL CR TRACT ELEV 2042 METERS SOUNDING ID 2734

TE 07/09/76 TIME 06:15MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
76.	114.	0.0	-0.79

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2735

E 07/09/76 TIME 11:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
495.	535.	0.0	-0.75

****

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2732

E 07/11/76 TIME 06:45MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
76.	114.	0.0	-0.39

****

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2724

E 07/11/76 TIME 11:30MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

THERE ARE NO INVERSION BASES WITHIN 1500M OF THE SFC

LAYER BASE METERS AGL	LAYER TOP METERS AGL	DT/DZ (DEG C)/100M
0.	100.	-0.32
100.	250.	-0.46
250.	500.	-0.88
500.	750.	-1.04
750.	1000.	-1.04
1000.	1500.	-0.89

****

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2726

E 07/13/76 TIME 07:15MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
316.	392.	0.0	-0.85

****

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2736

E 07/13/76 TIME 12:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

THERE ARE NO INVERSION BASES WITHIN 1500M OF THE SFC

LAYER BASE METERS AGL	LAYER TOP METERS AGL	DT/DZ (DEG C)/100M
0.	100.	-1.35
100.	250.	-0.92
250.	500.	-1.06
500.	750.	-1.07
750.	1000.	-0.87
1000.	1500.	-0.82

****

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2750

ATE 07/15/76 TIME 06:45MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
38.	572.	0.02	-0.24

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2728

ATE 07/15/76 TIME 11:30MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
191.	229.	0.24	-0.75

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2799

ATE 07/17/76 TIME 06:30MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

THERE ARE INSUFFICIENT DATA WITHIN 2000M OF THE SFC

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2727

ATE 07/17/76 TIME 12:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

THERE ARE NO INVERSION BASES WITHIN 1500M OF THE SFC

LAYER BASE METERS AGL	LAYER TOP METERS AGL	DT/DZ (DEG C)/100M
0.	100.	-1.04
100.	250.	-0.86
250.	500.	-1.09
500.	750.	-1.01
750.	1000.	-1.01
1000.	1500.	-0.91

COL CB TRACT ELEV 2042 METERS SOUNDING ID 1424

ATE 07/19/76 TIME 06:30MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
152.	229.	0.35	-0.41

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2309

ATE 07/19/76 TIME 12:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
365.	408.	0.0	-1.12

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2063

E 07/21/76 TIME 06:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	76.	0.12	0.0

****

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2312

E 07/21/76 TIME 12:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

THERE ARE NO INVERSION BASES WITHIN 1500M OF THE SFC

LAYER BASE METERS AGL	LAYER TOP METERS AGL	DT/DZ (DEG C)/100M
0.	100.	-1.82
100.	250.	-0.80
250.	500.	-1.02
500.	750.	-0.93
750.	1000.	-0.99
1000.	1500.	-0.97

****

COL CB TRACT ELEV 2042 METERS SOUNDING ID 1746

E 07/23/76 TIME 06:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
38.	76.	0.0	-0.24

****

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2216

E 07/23/76 TIME 12:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

THERE ARE NO INVERSION BASES WITHIN 1500M OF THE SFC

LAYER BASE METERS AGL	LAYER TOP METERS AGL	DT/DZ (DEG C)/100M
0.	100.	-0.67
100.	250.	-0.45
250.	500.	-0.85
500.	750.	-0.76
750.	1000.	-0.73
1000.	1500.	-0.73

****

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2310

E 07/25/76 TIME 06:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
1177.	1215.	1.44	-0.95

****

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2317

E 07/25/76 TIME 12:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

THERE ARE INSUFFICIENT DATA WITHIN 2000M OF THE SFC

MONTH: JULY YEAR: 1976. COL CB TRACT ELEV 2042 METERS

HOLZWORTHIS CLASSIFICATION SCHEME FOR INVERSIONS
MODIFIED TO SHOW TOTAL NUMBER INSTEAD OF PERCENT

THICKNESS (METERS)	INVERSION BASE HEIGHT (M) SFC	1- 100	101- 250	251- 500	501- 750	751- 1000	1001- 1500	1501- 2000	2001- 2500	2501- 3000	TOTAL
1 - 100	1	3	2	3	0	0	1	0	0	0	10
101 - 250	0	0	0	0	0	0	0	0	0	0	0
251 - 500	0	0	0	0	0	0	0	0	0	0	0
501 - 750	0	1	0	0	0	0	0	0	0	0	1
751 - 1000	0	0	0	0	0	0	0	0	0	0	0
1001 - 1500	0	0	0	0	0	0	0	0	0	0	0
> 1500	0	0	0	0	0	0	0	0	0	0	0
INV TOTAL	1	4	2	3	0	0	1	0	0	0	11
DT/DZ 5		3	0	0	0	0	0	0	0	0	3
FROM INV 4		1	2	1	0	0	0	0	0	0	4
BASE 3		0	0	2	0	0	1	0	0	0	3
TO 2		0	0	0	0	0	0	0	0	0	0
SFC 1		0	0	0	0	0	0	0	0	0	0
NO INV TOT		8	8	8	8	8	8				
DT/DZ FOR 5		1	0	0	0	0	0				
SAME 4		2	4	1	2	2	1				
LAYERS 3		1	4	7	6	6	7				
AS INV 2		2	0	0	0	0	0				
BASE 1		2	0	0	0	0	0				

DT/DZ (DEG C)/100M
5= 0.00 TO -0.40
4=-0.41 TO -0.80
3=-0.81 TO -1.20
2=-1.21 TO -1.60
1=<-1.60

MONTH: JULY YEAR: 1976. COL CB TRACT SFC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	SPEED (METER/SEC) 0-3	4-6	7-10	11-16	17-21	GREATER THAN 21	AVERAGE SPEED	TOTAL
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AVG SPEED	0.0	0.0	0.0	0.0	0.0	0.0		0.0
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0		0.0

RELATIVE FREQUENCY OF OCCURRENCE OF THE A STABILITY CLASS IS 0.0

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 1 SOUNDINGS FROM A SAMPLE OF 21 SOUNDINGS DID NOT HAVE 500 M OF TEMP AND WIND DATA

MONTH: JULY YEAR: 1976. COL CB TRACT SFC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	SPEED (METER/SEC) 0-3	4-6	7-10	11-16	17-21	GREATER THAN 21	AVERAGE SPEED	TOTAL
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AVG SPEED	0.0	0.0	0.0	0.0	0.0	0.0		0.0
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0		0.0

RELATIVE FREQUENCY OF OCCURRENCE OF THE 8 STABILITY CLASS IS 0.0

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 1 SOUNDINGS FROM A SAMPLE OF 21 SOUNDINGS DID NOT HAVE 500 M OF TEMP AND WIND DATA

MONTH: JULY YEAR: 1976. COL CB TRACT SFC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	SPEED (METER/SEC) 0-3	4-6	7-10	11-16	17-21	GREATER THAN 21	AVERAGE SPEED	TOTAL
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AVG SPEED	0.0	0.0	0.0	0.0	0.0	0.0		0.0
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0		0.0

RELATIVE FREQUENCY OF OCCURRENCE OF THE C STABILITY CLASS IS 0.0

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 1 SOUNDINGS FROM A SAMPLE OF 21 SOUNDINGS DID NOT HAVE 500 M OF TEMP AND WIND DATA

MONTH: JULY YEAR: 1976. COL CB TRACT SFC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	SPEED (METER/SEC) 0-3	4-6	7-10	11-16	17-21	GREATER THAN 21	AVERAGE SPEED	TOTAL
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.06	0.0	0.0	0.0	0.0	0.0	1.6	0.06
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.06	0.0	0.0	0.0	0.0	0.0	2.0	0.06
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.06	0.0	0.0	0.0	0.0	0.0	1.8	0.06
SSE	0.06	0.06	0.0	0.0	0.0	0.0	3.6	0.11
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.11	0.0	0.0	0.0	0.0	0.0	1.8	0.11
SW	0.06	0.0	0.0	0.0	0.0	0.0	2.3	0.06
WSW	0.11	0.06	0.0	0.0	0.0	0.0	2.0	0.17
W	0.06	0.0	0.0	0.0	0.0	0.0	0.9	0.06
WNW	0.11	0.06	0.0	0.0	0.0	0.0	2.5	0.17
NW	0.06	0.0	0.0	0.0	0.0	0.0	2.8	0.06
NNW	0.11	0.0	0.0	0.0	0.0	0.0	1.5	0.11
AVG SPEED	1.7	4.4	0.0	0.0	0.0	0.0		0.0
TOTAL	0.83	0.17	0.0	0.0	0.0	0.0		1.00

RELATIVE FREQUENCY OF OCCURRENCE OF THE 0 STABILITY CLASS IS 0.90

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 1 SOUNDINGS FROM A SAMPLE OF 21 SOUNDINGS DID NOT HAVE 500 M OF TEMP AND WIND DATA

MONTH: JULY YEAR: 1976. COL CR TRACT SEC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	SPEED (METER/SEC) 0-3	4-6	7-10	11-16	17-21	GREATER THAN 21	AVERAGE SPEED	TOTAL
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.50	0.0	0.0	0.0	0.0	0.0	1.3	0.50
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.50	0.0	0.0	0.0	0.0	0.0	1.8	0.50
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AVG SPEED	1.6	0.0	0.0	0.0	0.0	0.0		0.0
TOTAL	1.00	0.0	0.0	0.0	0.0	0.0		1.00

RELATIVE FREQUENCY OF OCCURRENCE OF THE F STABILITY CLASS IS 0.10

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 1 SOUNDINGS FROM A SAMPLE OF 21 SOUNDINGS DID NOT HAVE 500 M OF TEMP AND WIND DATA

MONTH: JULY YEAR: 1976. COL CB TRACT SFC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	SPEED (METER/SEC) 0-3	4-6	7-10	11-16	17-21	GREATER THAN 21	AVERAGE SPEED	TOTAL
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AVG SPEED	0.0	0.0	0.0	0.0	0.0	0.0		0.0
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0		0.0

RELATIVE FREQUENCY OF OCCURRENCE OF THE F STABILITY CLASS IS 0.0

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 1 SOUNDINGS FROM A SAMPLE OF 21 SOUNDINGS DID NOT HAVE 500 M OF TEMP AND WIND DATA

MONTH: JULY YEAR: 1976. COL CR TRACT SFC TO 500 METERS

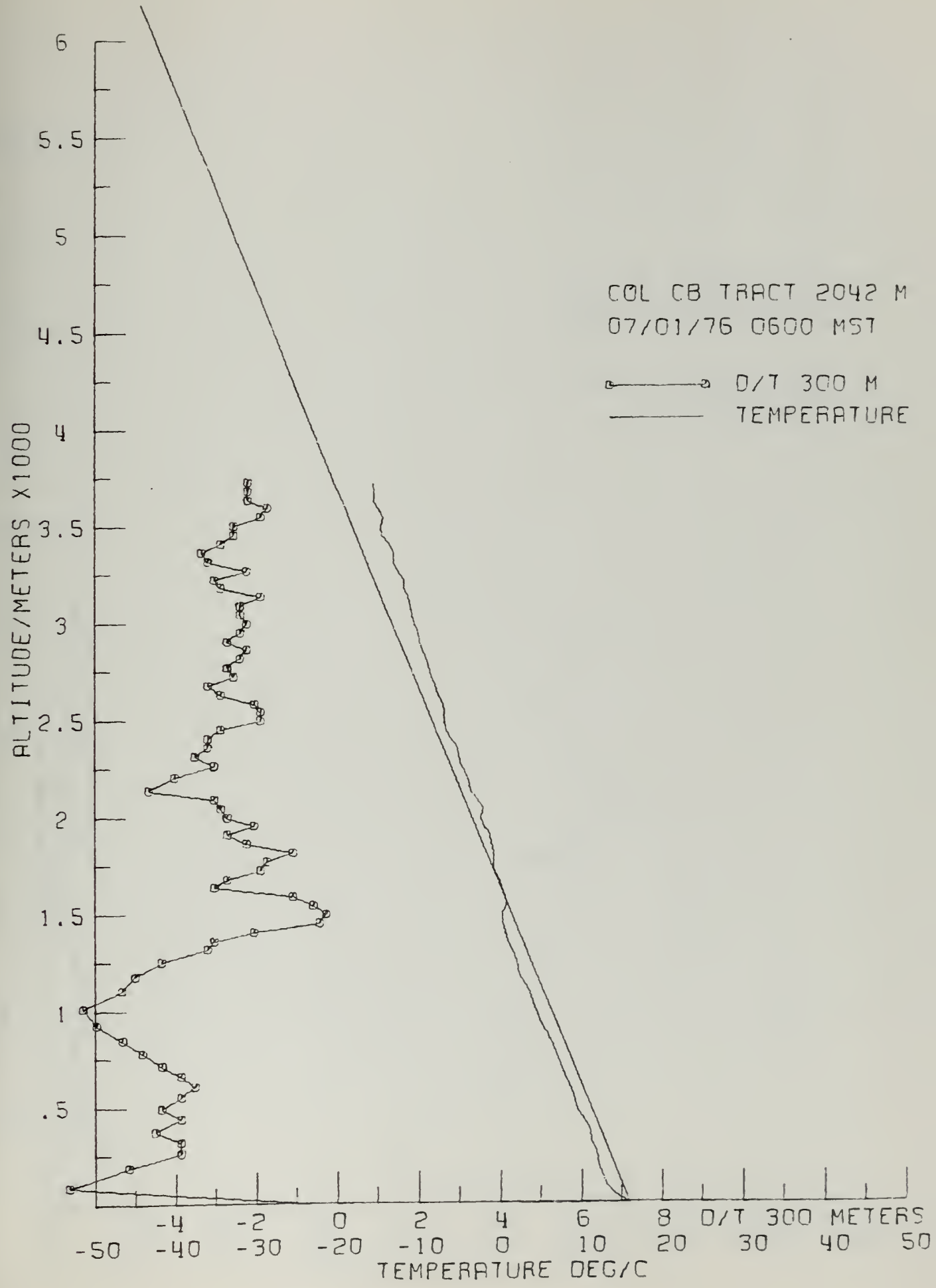
NORMALIZED FREQUENCY DISTRIBUTION

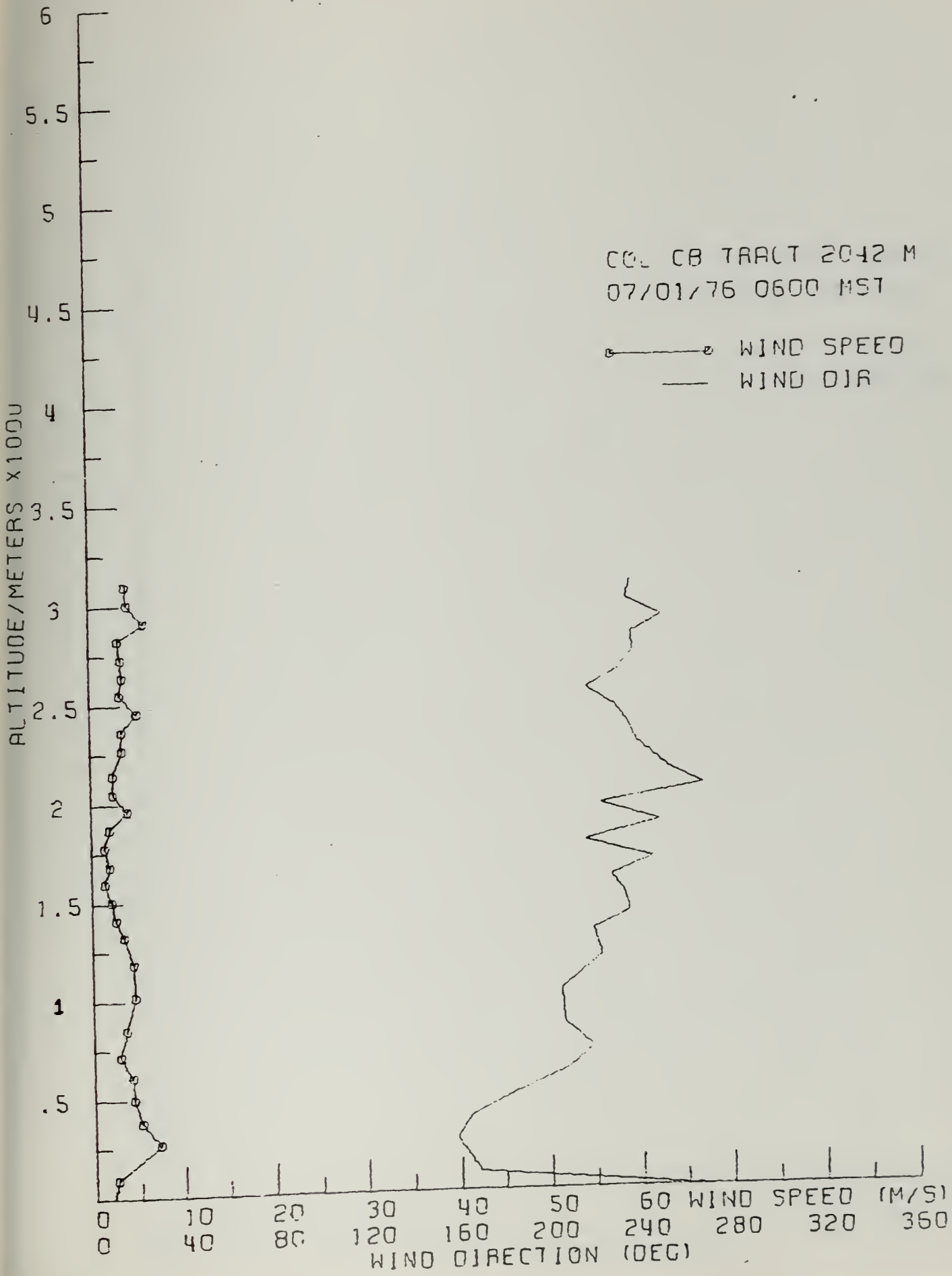
DIRECTION	SPEED (METER/SEC) 0-3	4-6	7-10	11-16	17-21	GREATER THAN 21	AVERAGE SPEED	TOTAL
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.05	0.0	0.0	0.0	0.0	0.0	1.6	0.05
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.05	0.0	0.0	0.0	0.0	0.0	2.0	0.05
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.05	0.0	0.0	0.0	0.0	0.0	1.8	0.05
SSE	0.10	0.05	0.0	0.0	0.0	0.0	2.8	0.15
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.10	0.0	0.0	0.0	0.0	0.0	1.6	0.10
SW	0.05	0.0	0.0	0.0	0.0	0.0	2.3	0.05
WSW	0.10	0.05	0.0	0.0	0.0	0.0	2.0	0.15
W	0.08	0.0	0.0	0.0	0.0	0.0	0.9	0.05
WNW	0.15	0.05	0.0	0.0	0.0	0.0	2.3	0.20
NW	0.05	0.0	0.0	0.0	0.0	0.0	2.6	0.05
NNW	0.10	0.0	0.0	0.0	0.0	0.0	1.5	0.10
AVG SPEED	1.7	4.4	0.0	0.0	0.0	0.0		0.0
TOTAL	0.85	0.15	0.0	0.0	0.0	0.0		1.00

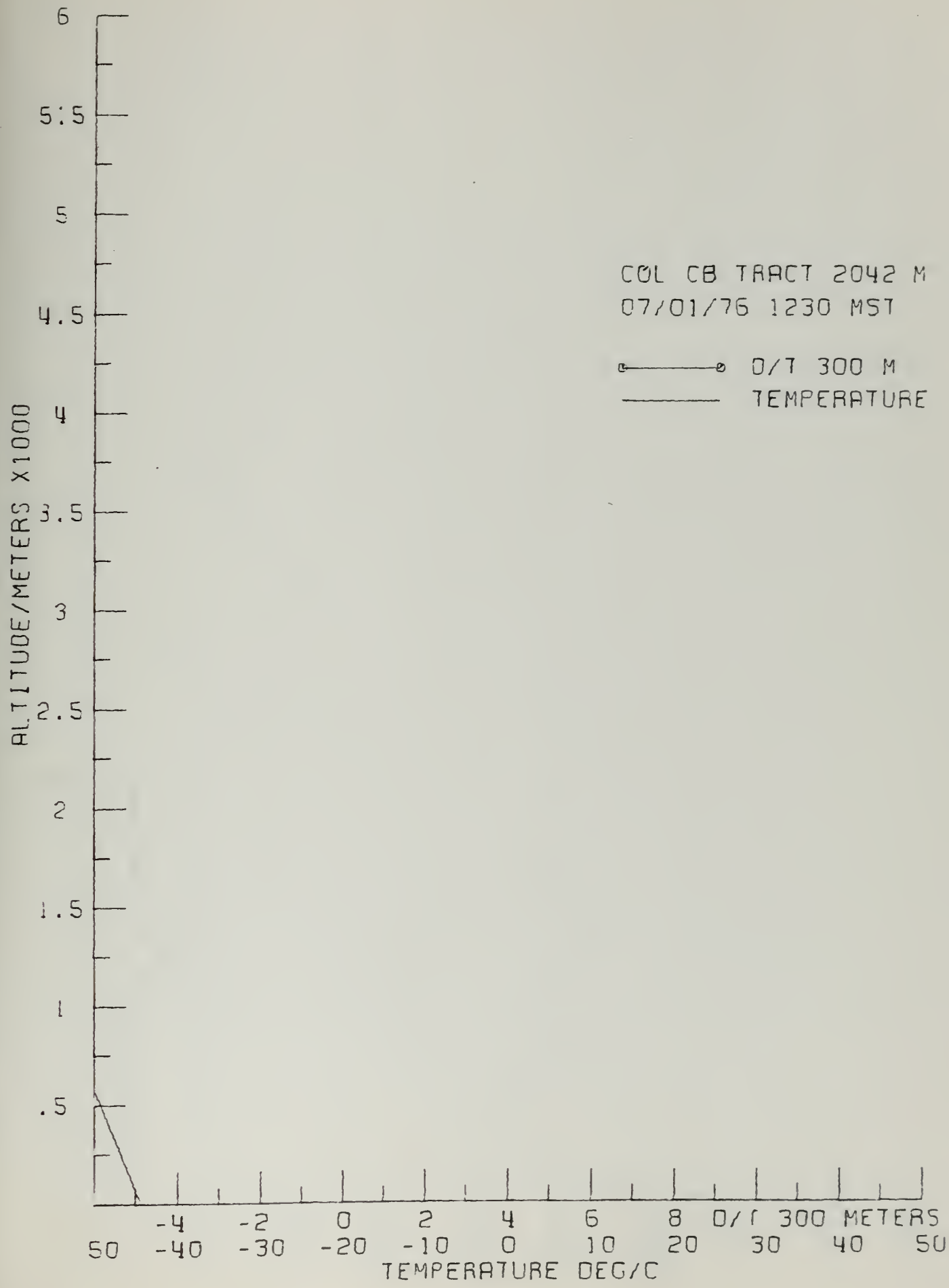
NORMALIZED FREQUENCY DISTRIBUTION INDEPENDENT OF STABILITY

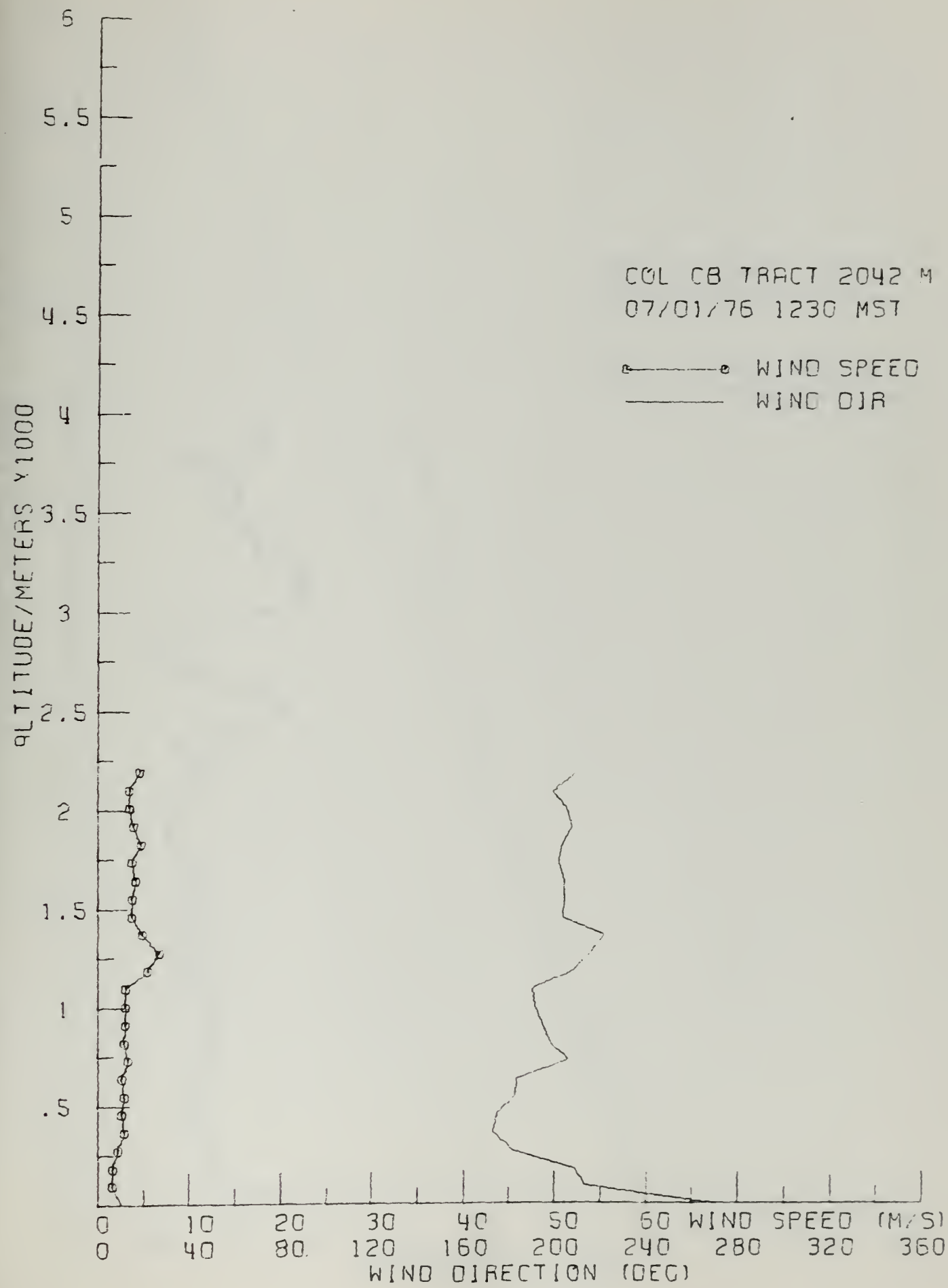
RELATIVE FREQUENCY OF CALM 0.0

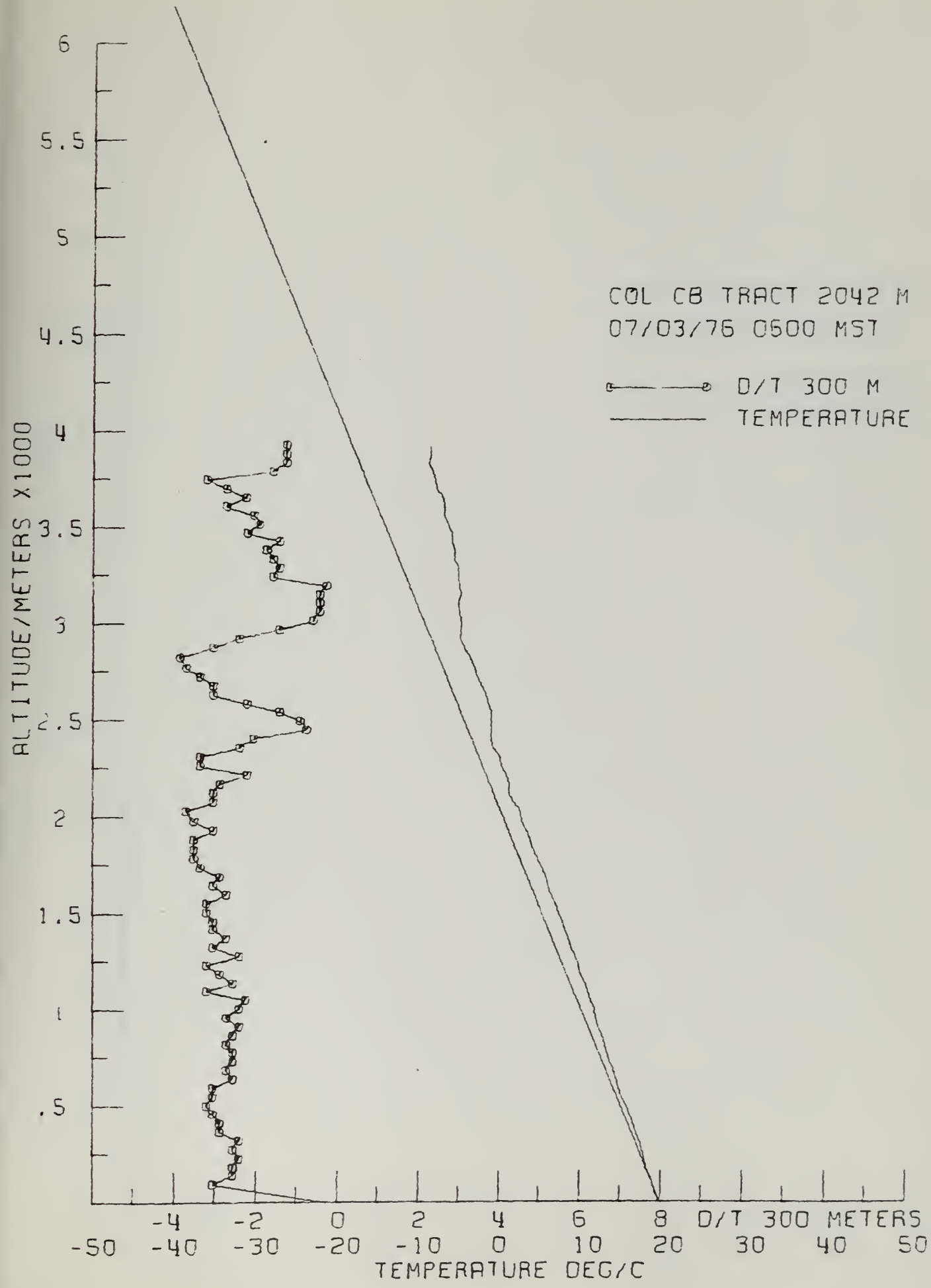
A TOTAL OF 1 SOUNDINGS FROM A SAMPLE OF 21 SOUNDINGS DID NOT HAVE 500 M OF TEMP AND WIND DATA


COL CB TRACT 2042 M
07/01/76 0600 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4
-2
0
2
4
6
8
D/T 300 METERS
-50
-40
-30
-20
-10
0
10
20
30
40
50
TEMPERATURE DEG/C


CO. CB TRACT 2042 M
07/01/76 0600 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


COL CB TRACT 2042 M
07/01/76 1230 MST
O/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4 -2 0 2 4 6 8 O/T 300 METERS
50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C


COL CB TRACT 2042 M
07/01/76 1230 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)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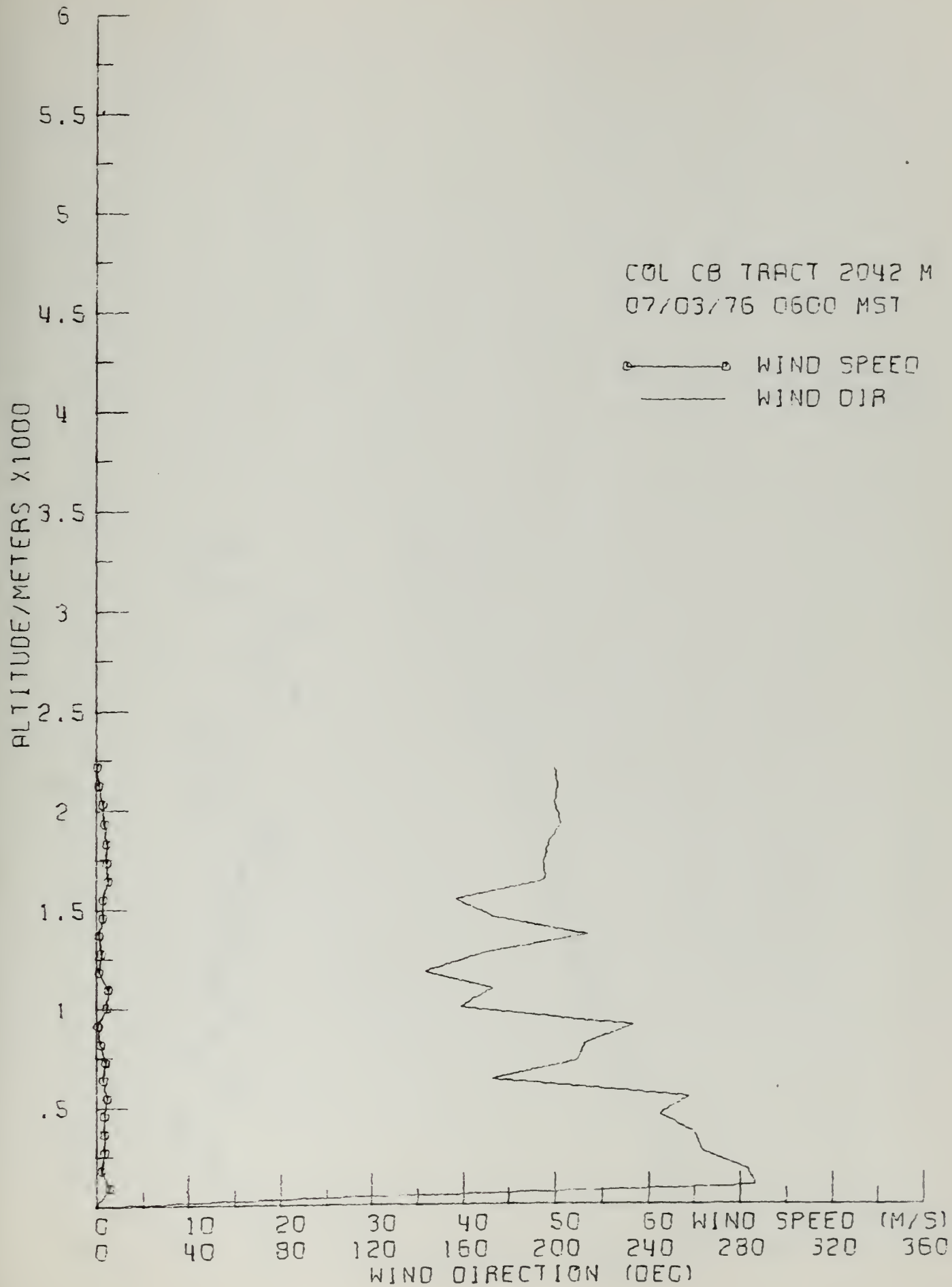
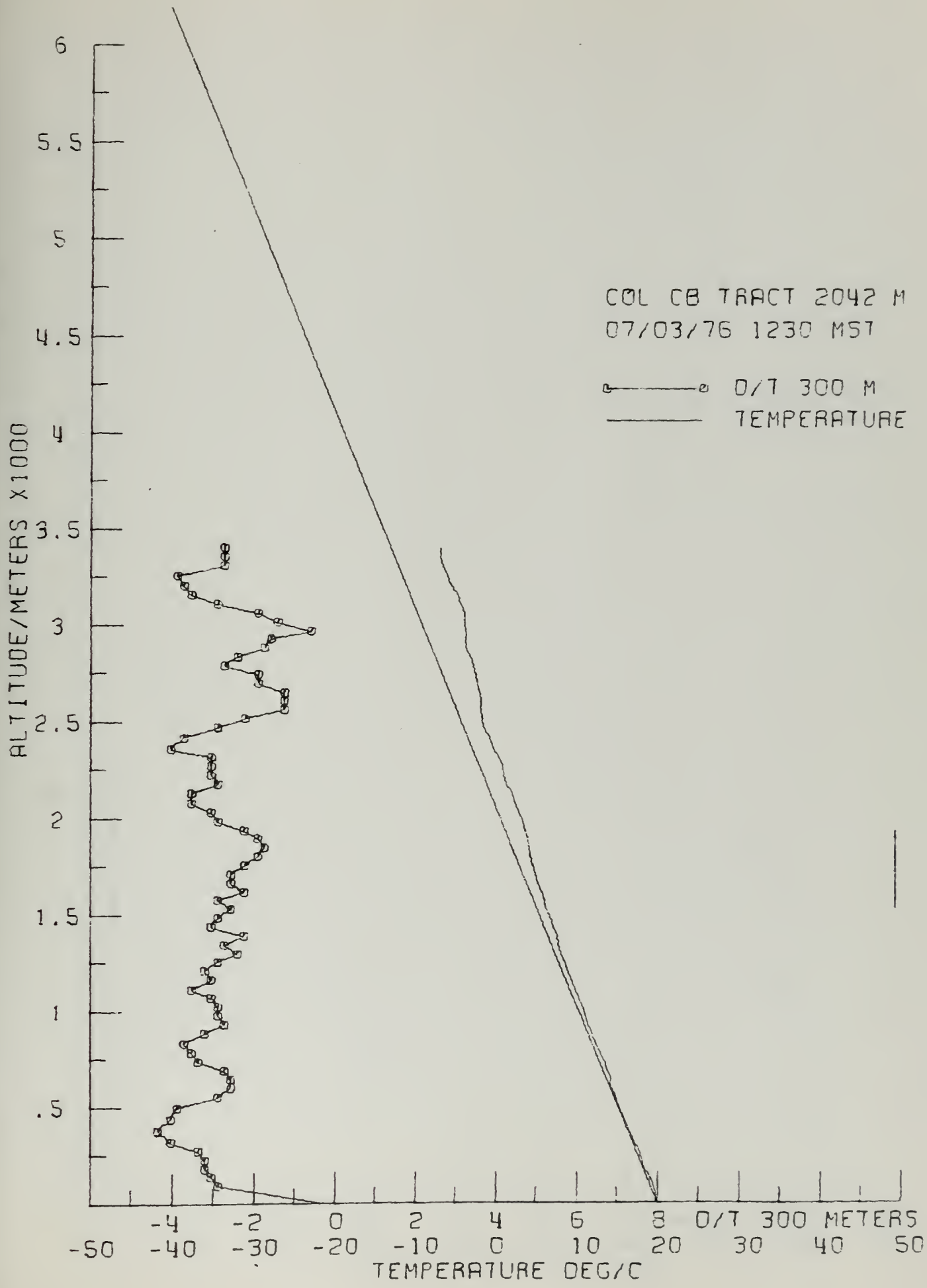
07/03/76 0600 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4
-2
0
2
4
6
8
D/T 300 METERS
-50
-40
-30
-20
-10
0
10
20
30
40
50
TEMPERATURE DEG/C


COL CB TRACT 2042 M
07/03/76 0600 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)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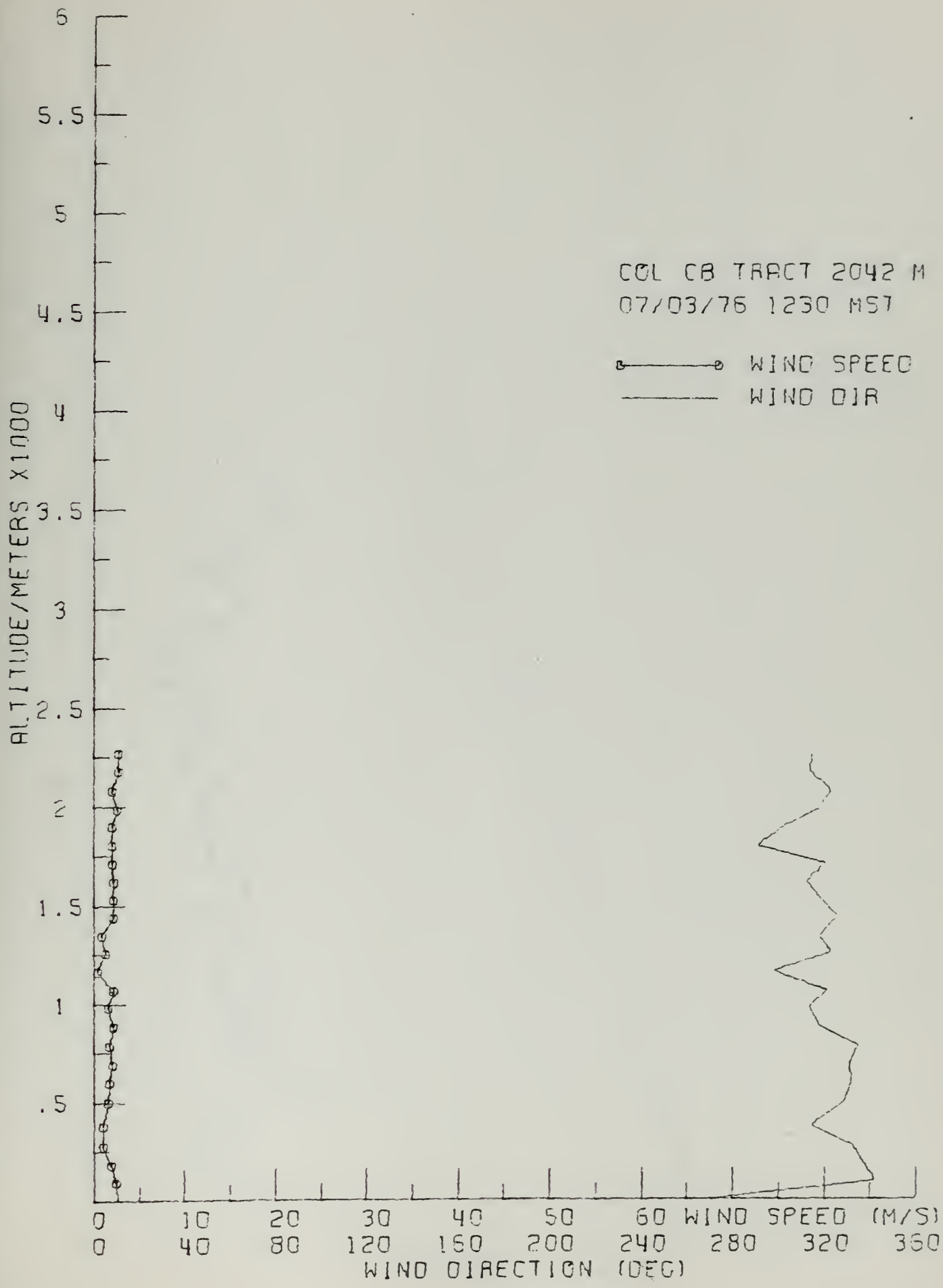
07/03/76 1230 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4
-2
0
2
4
6
8
D/T 300 METERS
-50
-40
-30
-20
-10
0
10
20
30
40
50
TEMPERATURE DEG/C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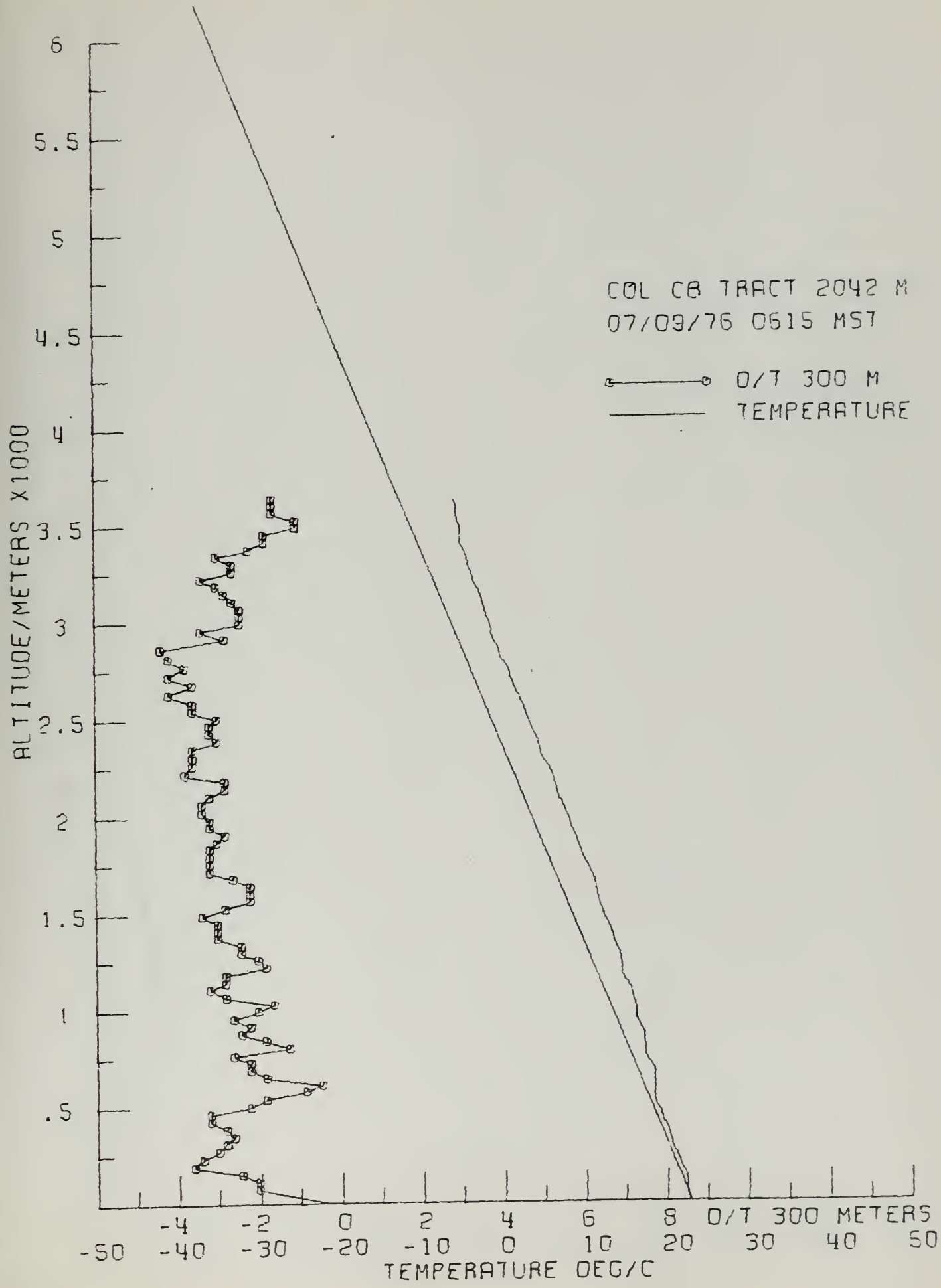
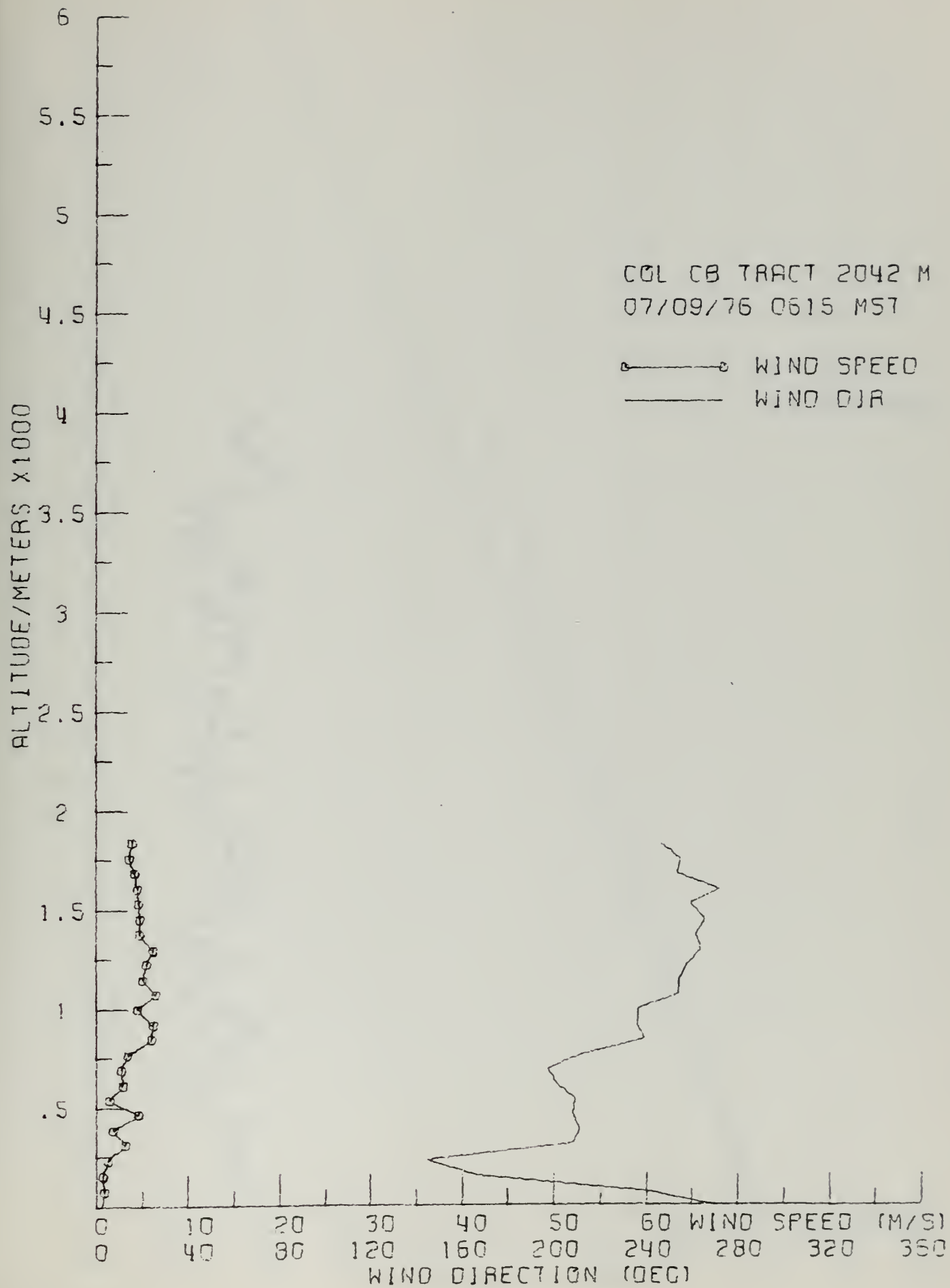
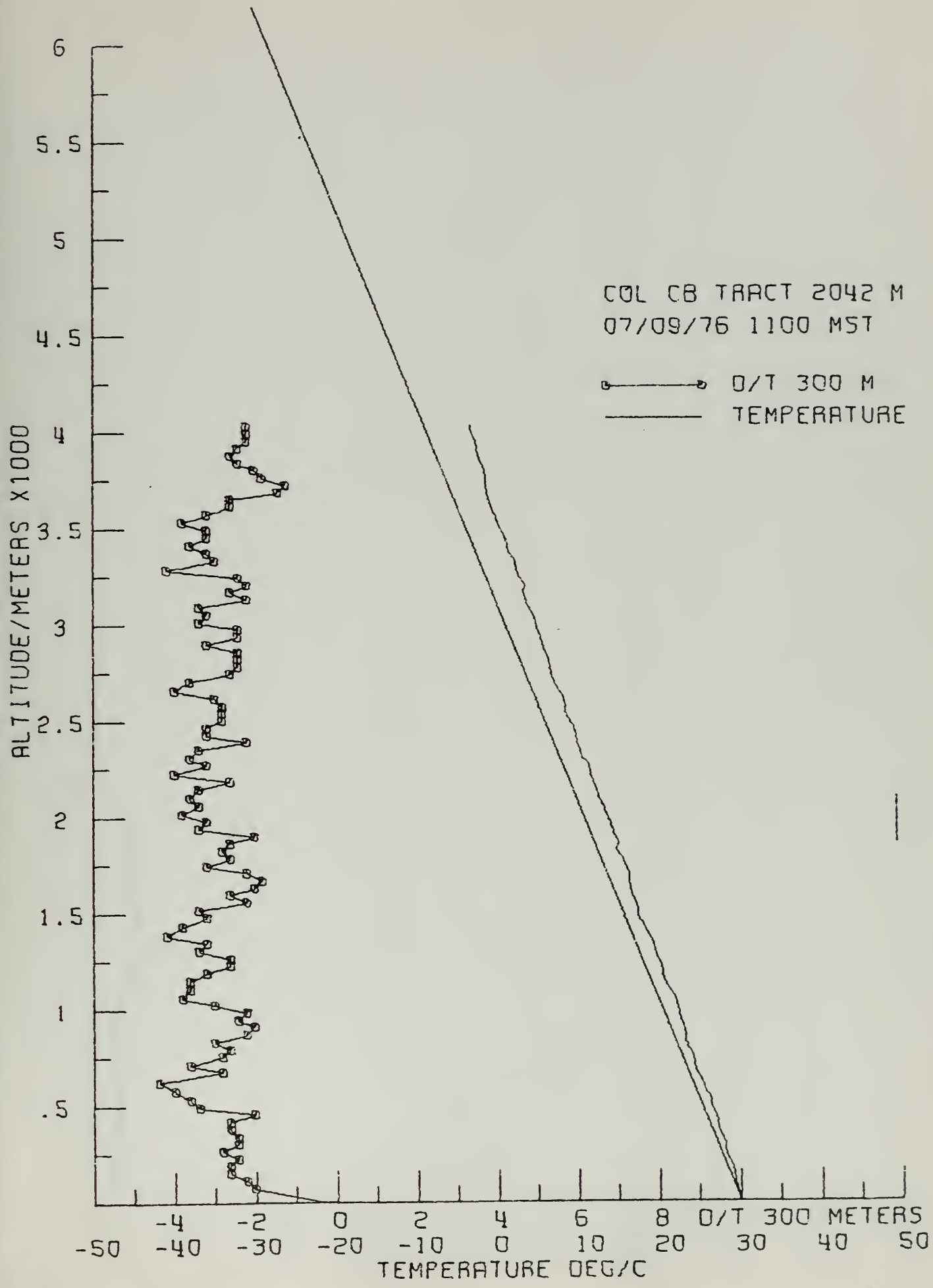
07/03/76 1230 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


COL CB TRACT 2042 M
07/09/76 0615 MST
O/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4
-2
0
2
4
6
8
O/T 300 METERS
-50
-40
-30
-20
-10
0
10
20
30
40
50
TEMPERATURE DEG/C


COL CB TRACT 2042 M
07/09/76 0615 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)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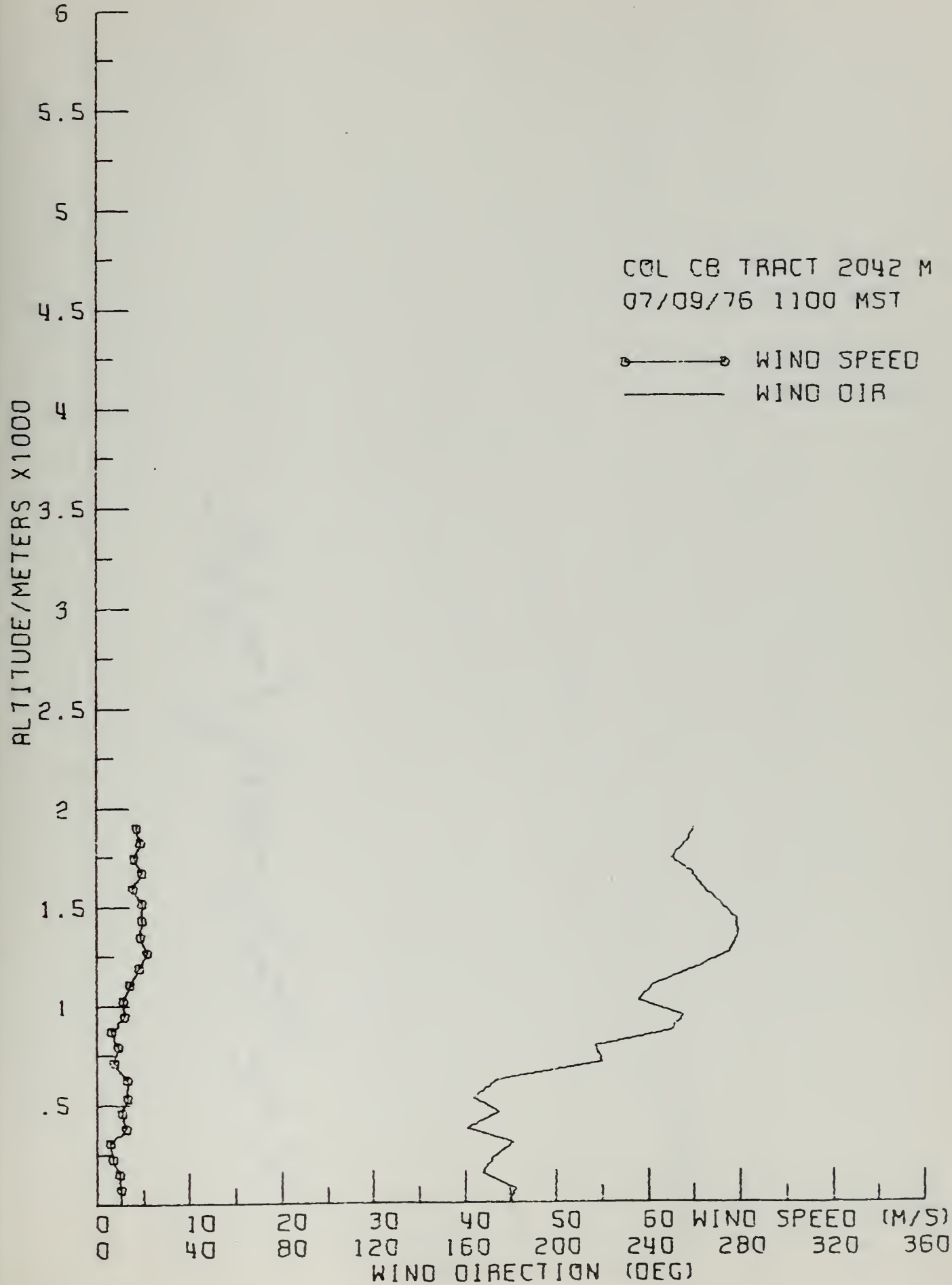
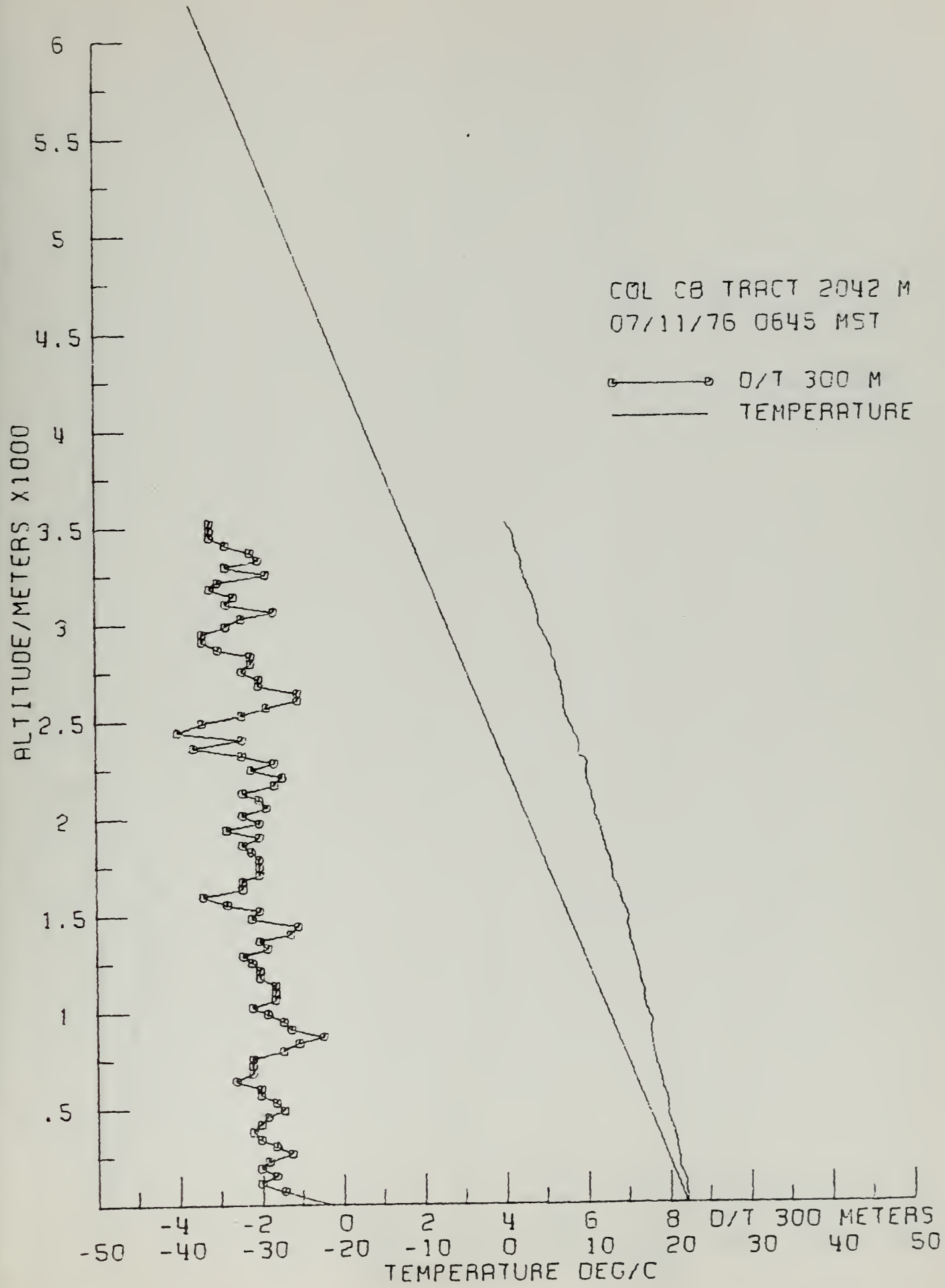
07/09/76 1100 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4
-2
0
2
4
6
8
D/T 300 METERS
-50
-40
-30
-20
-10
0
10
20
30
40
50
TEMPERATURE DEG/C


COL CB TRACT 2042 M
07/09/76 1100 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


COL CB TRACT 2042 M
07/11/76 0645 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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5.5
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4
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3
2.5
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1.5
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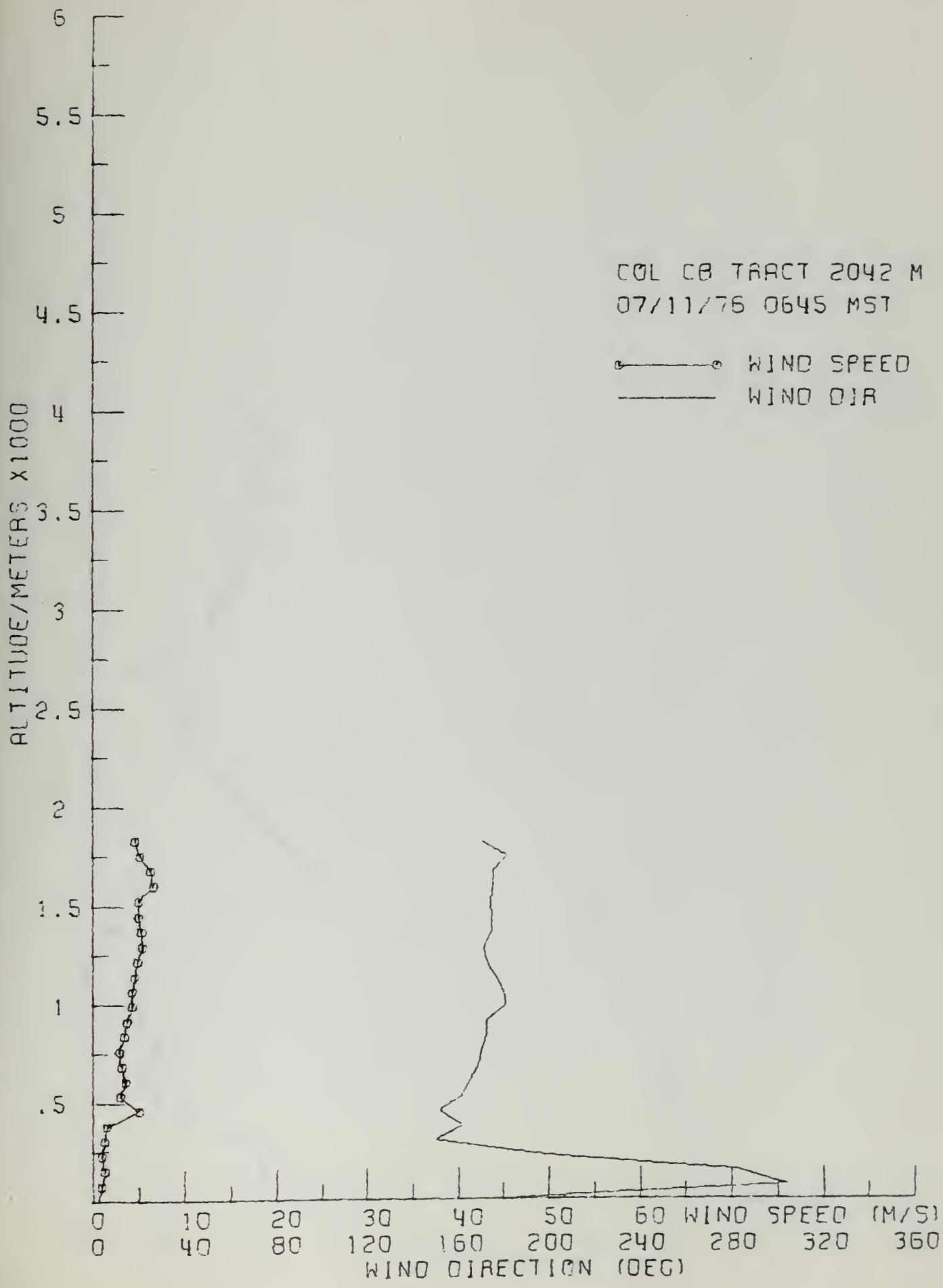
TEMPERATURE DEG/C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07/11/76 0645 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
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3
2.5
2
1.5
1
.5
0
10
20
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60 WIND SPEED (M/S)
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200
240
280
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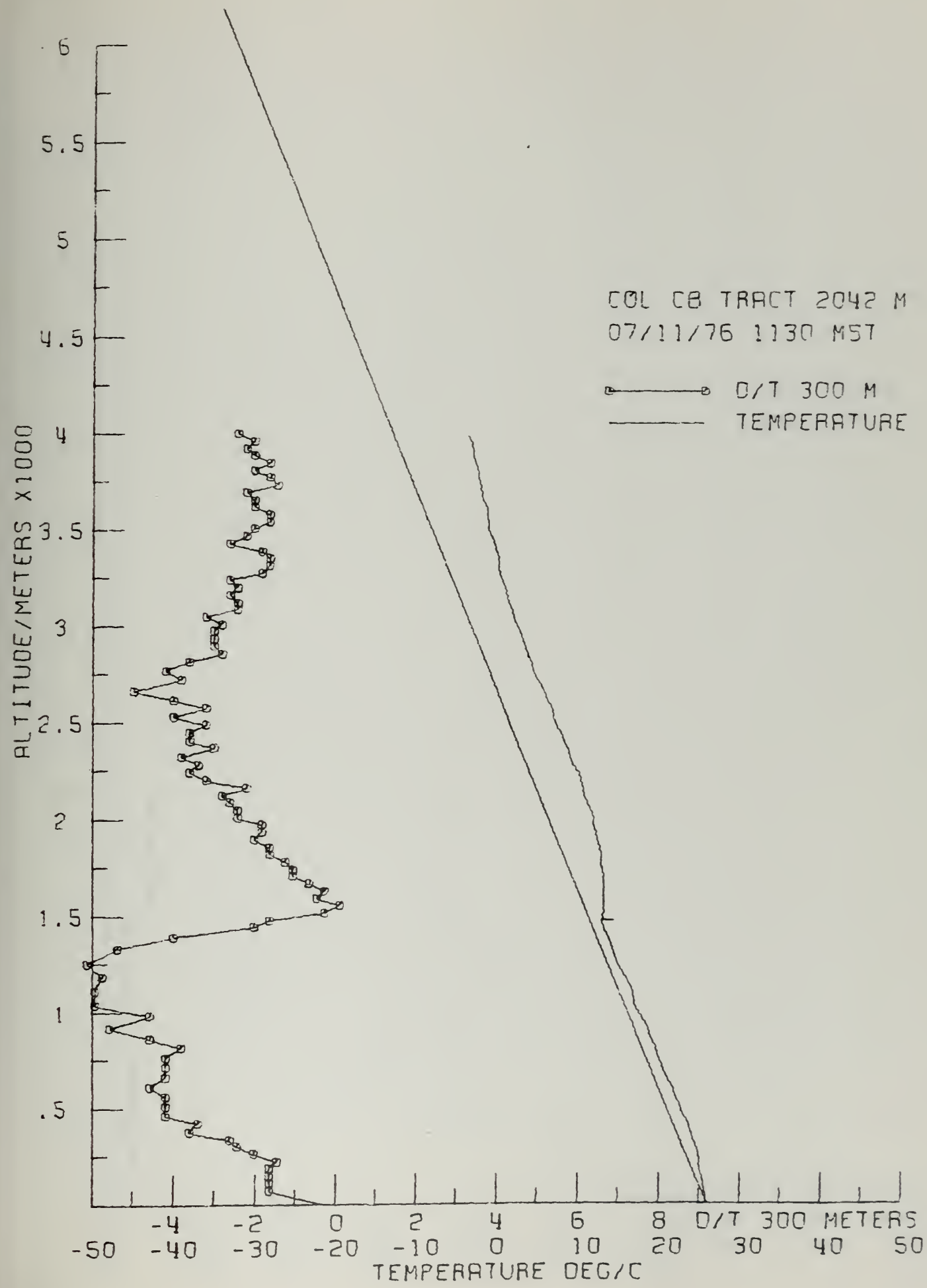
360
WIND DIRECTION (DEG)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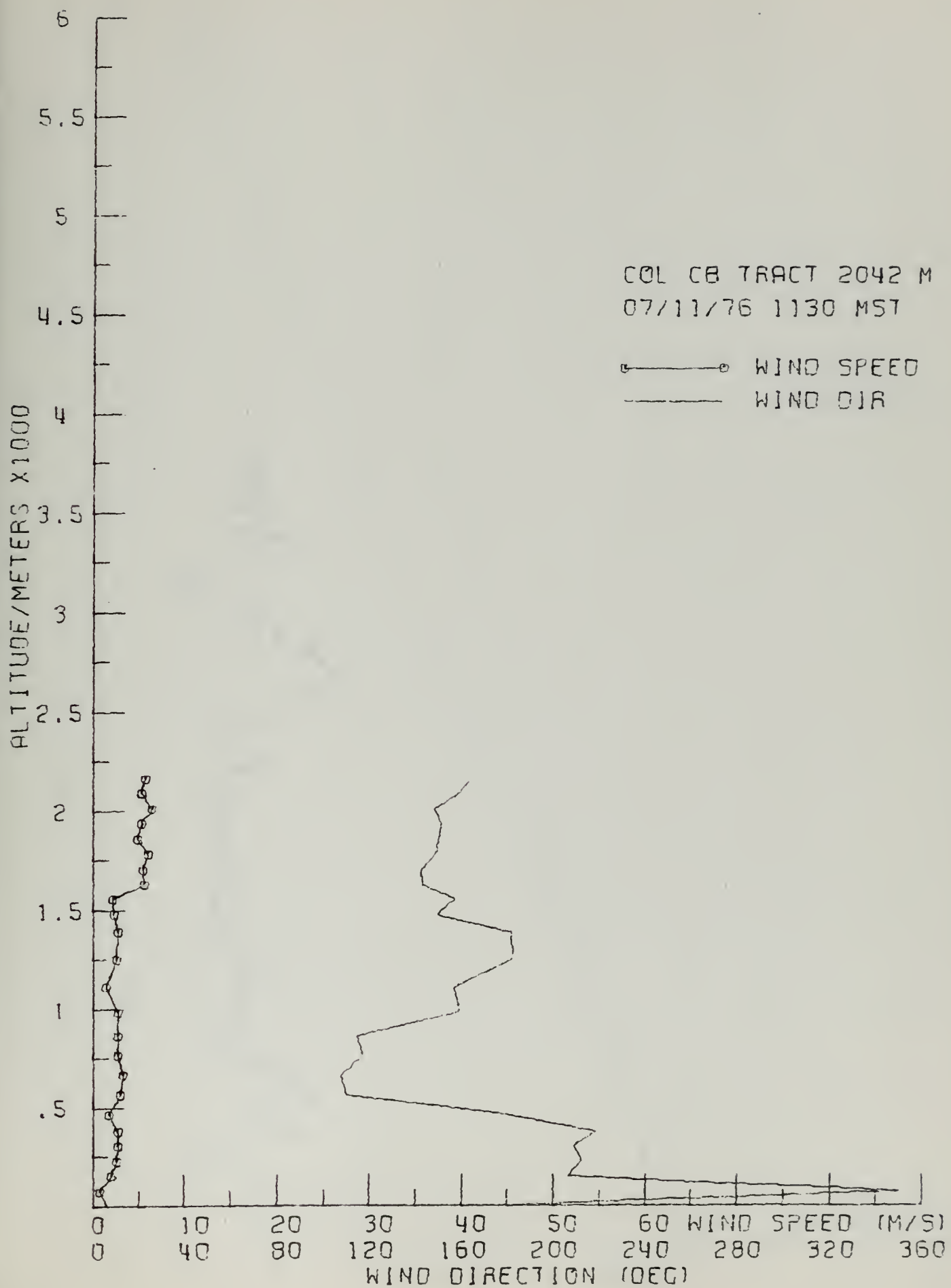
TEMPERATURE DEG/C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WIND DIR
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4
3.5
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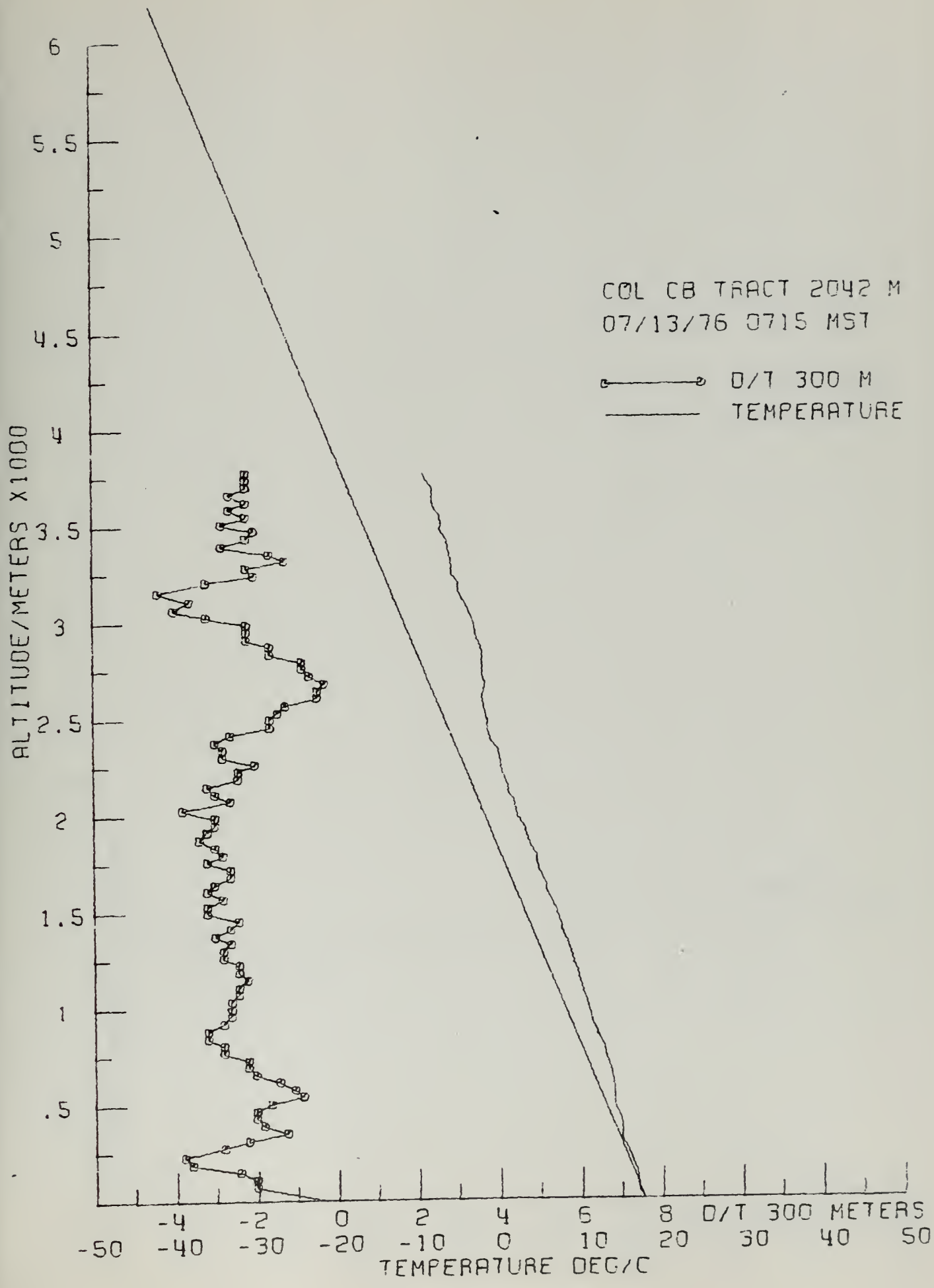
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)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4
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D/T 300 METERS
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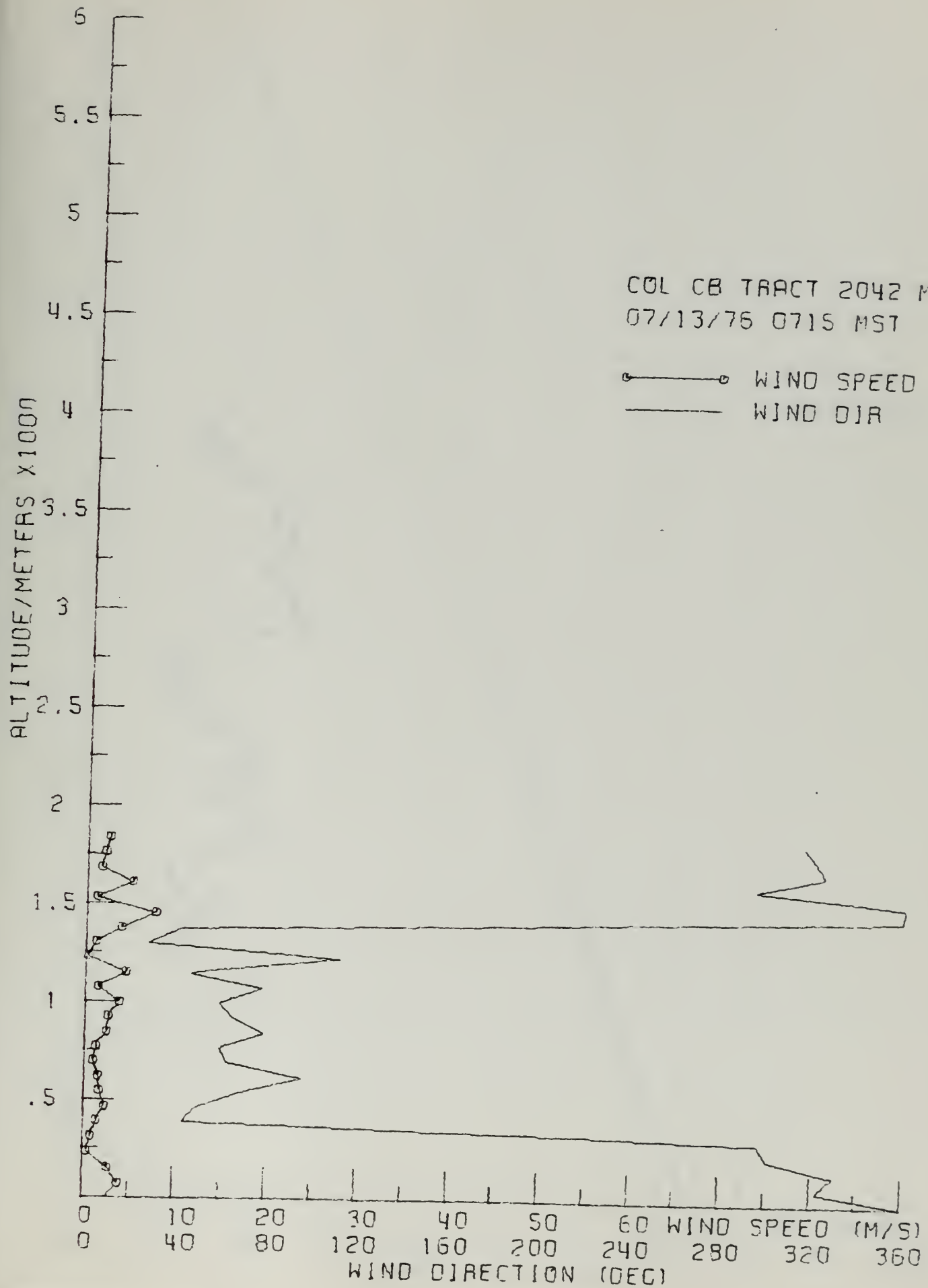
TEMPERATURE DEG/C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07/13/76 0715 MST
WIND SPEED
WIND DIR
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4.5
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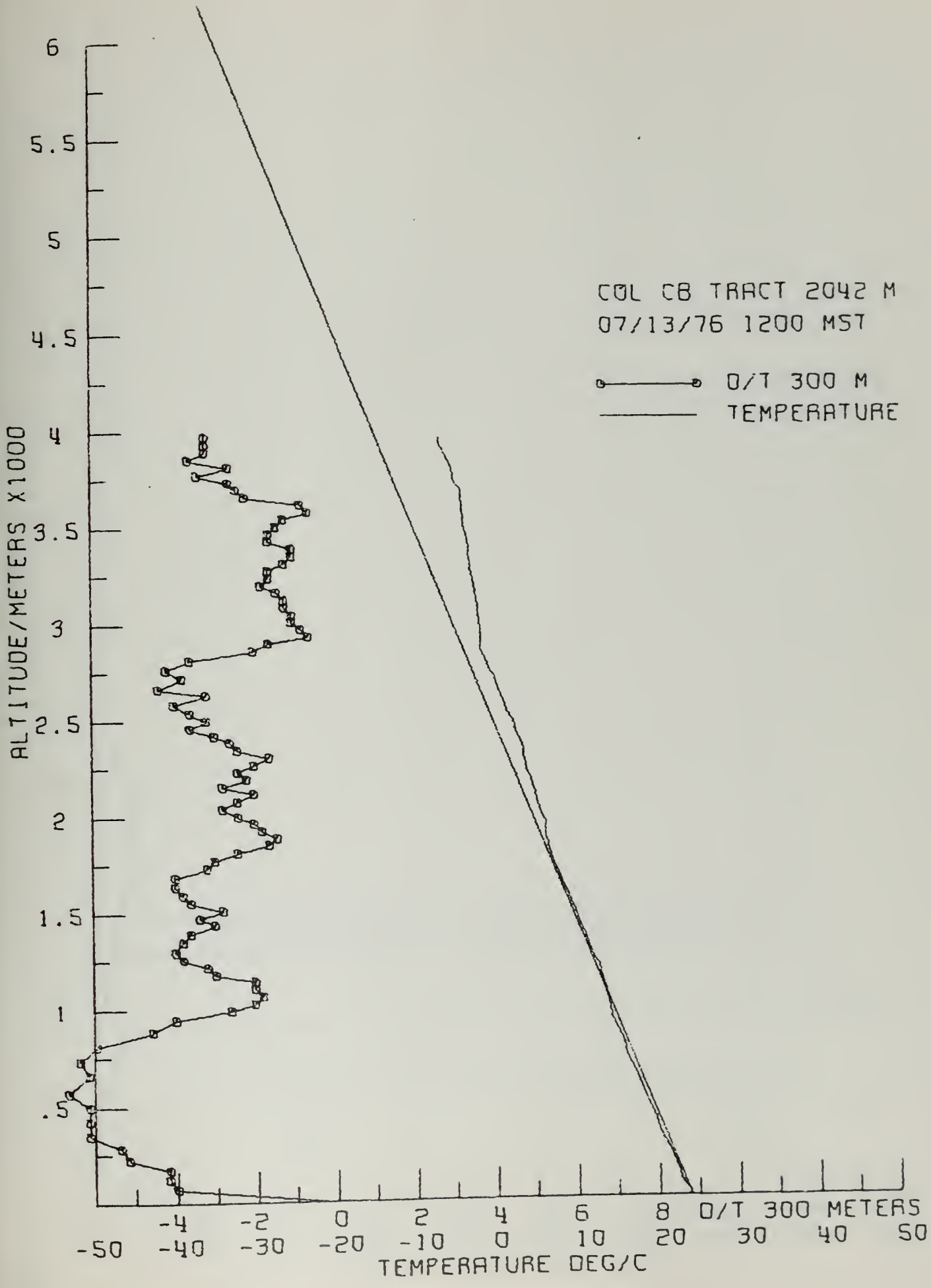
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)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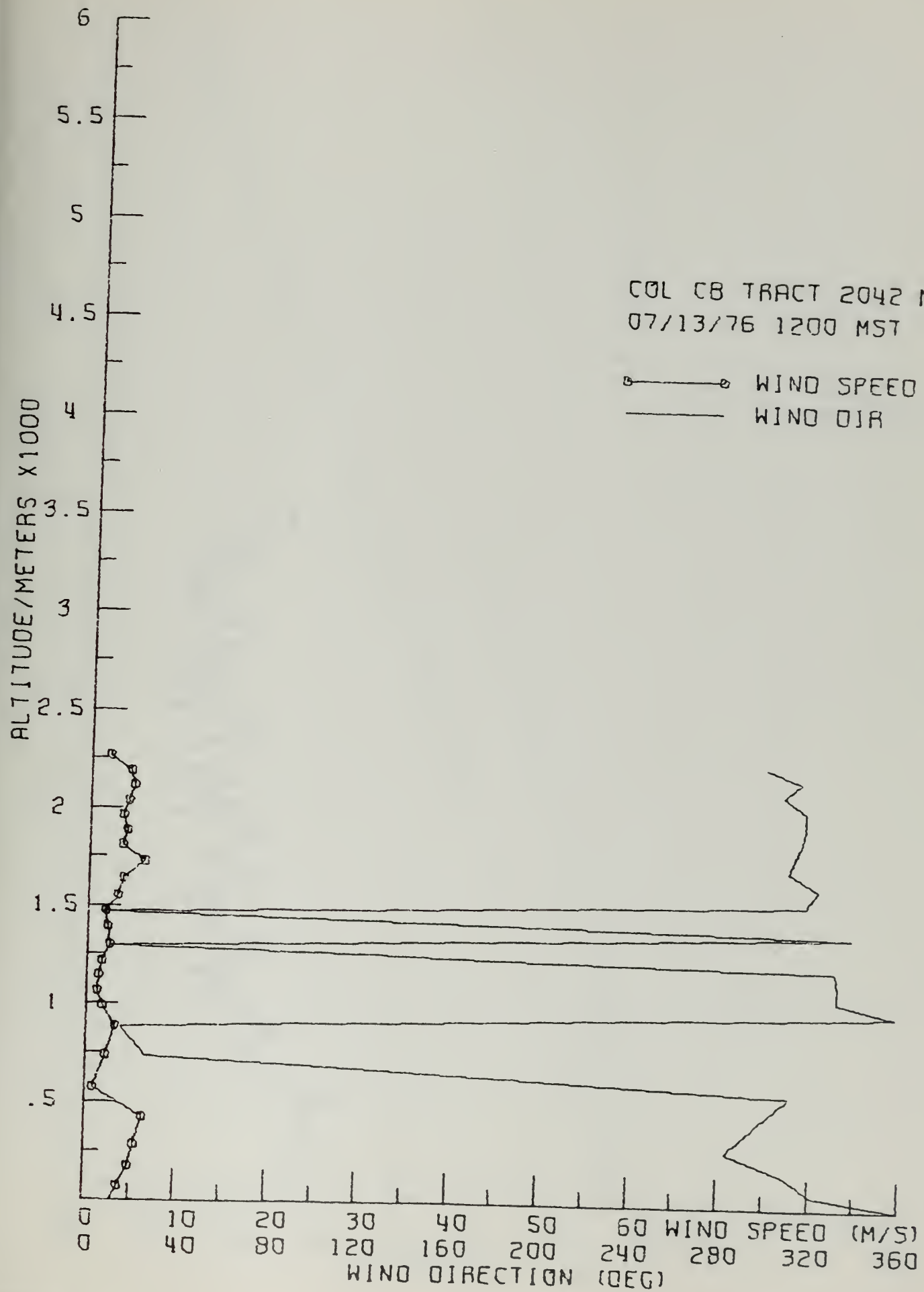
4
6
8
D/T 300 METERS
TEMPERATURE DEG/C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WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
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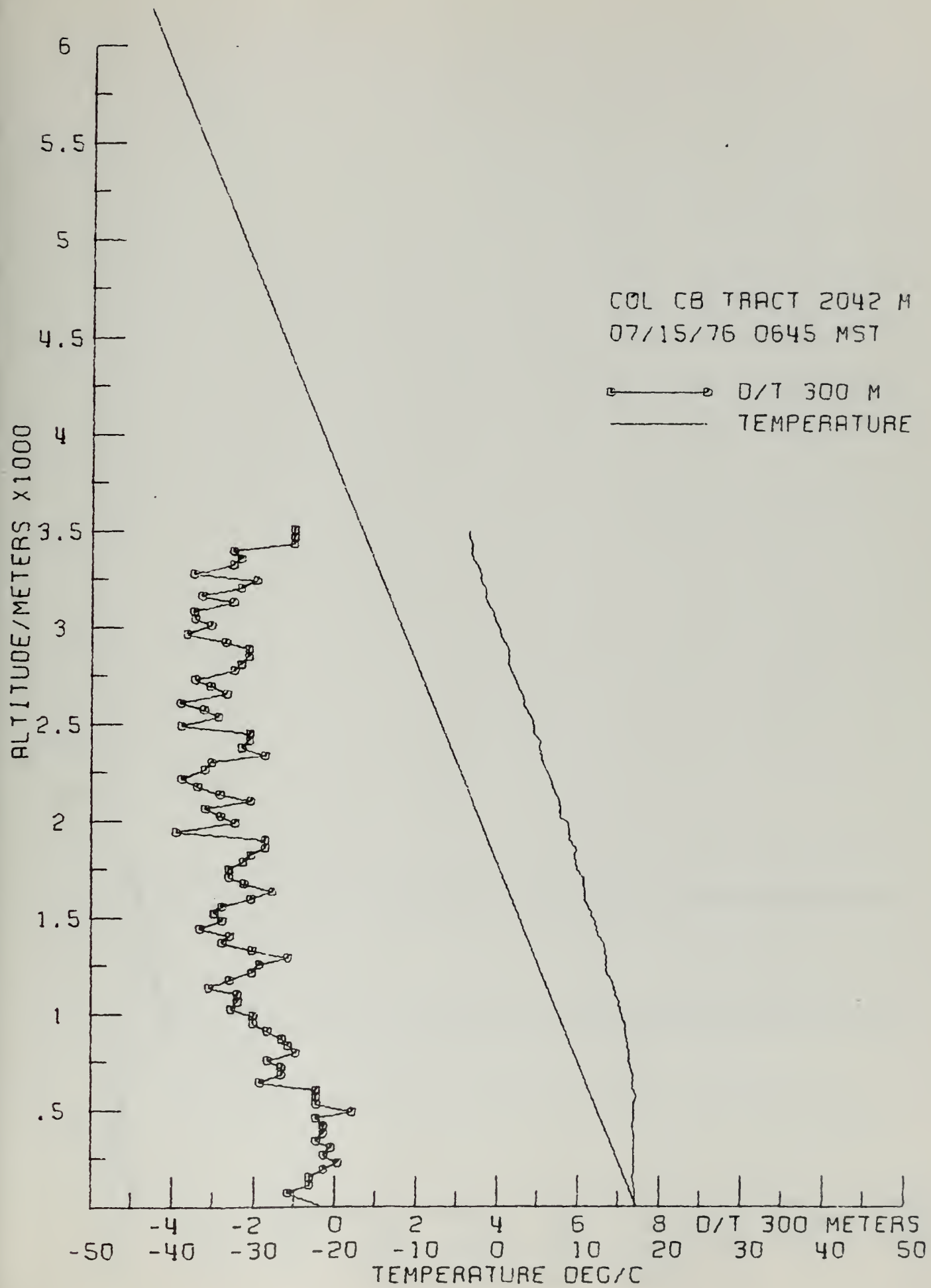
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)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07/15/76 0645 MST
D/T 300 M
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ALTITUDE/METERS X1000
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2
4
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D/T 300 METERS
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-10
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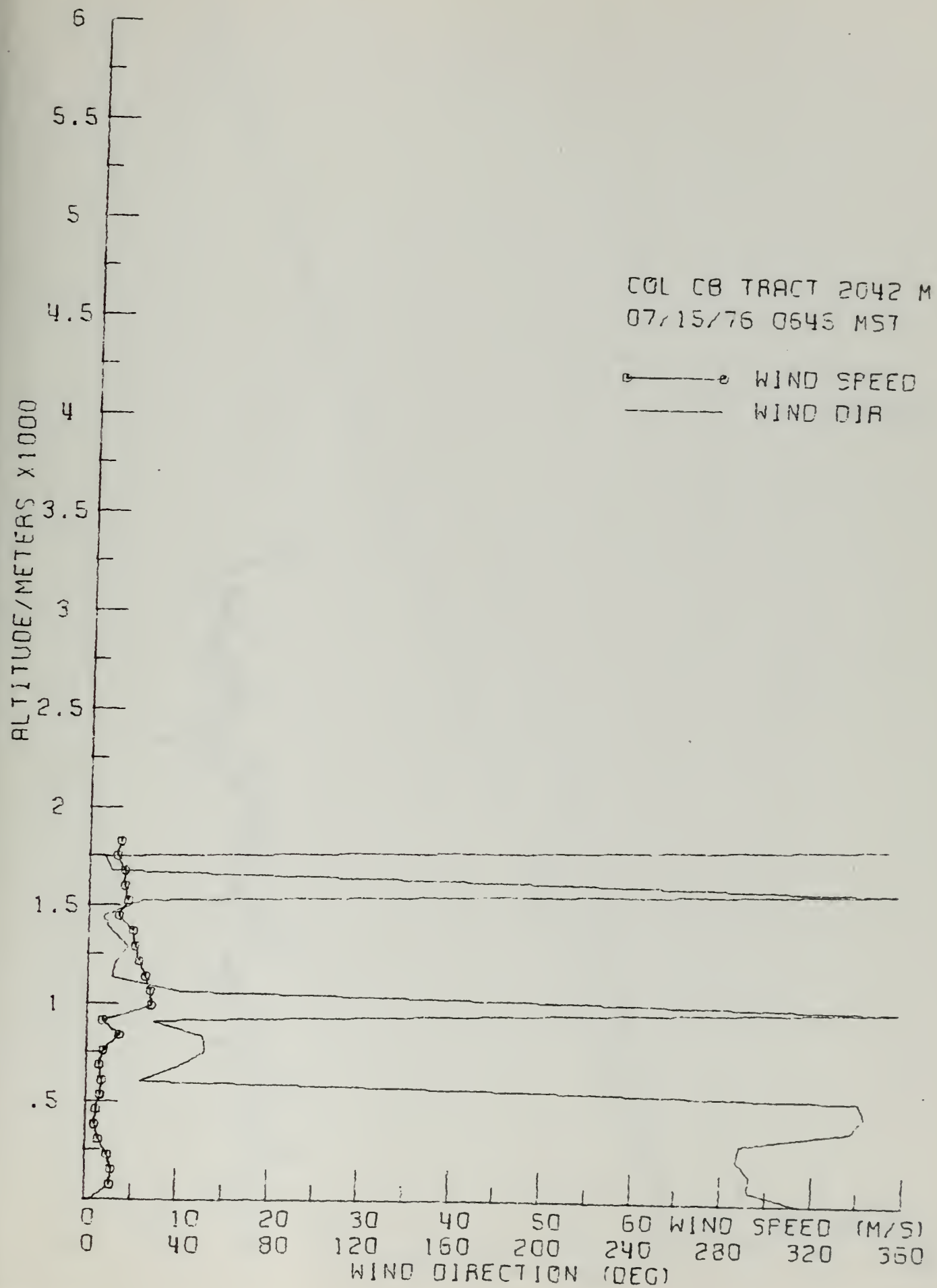
50
TEMPERATURE DEG/C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07/15/76 0643 MST
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WIND DIR
ALTITUDE/METERS X1000
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1
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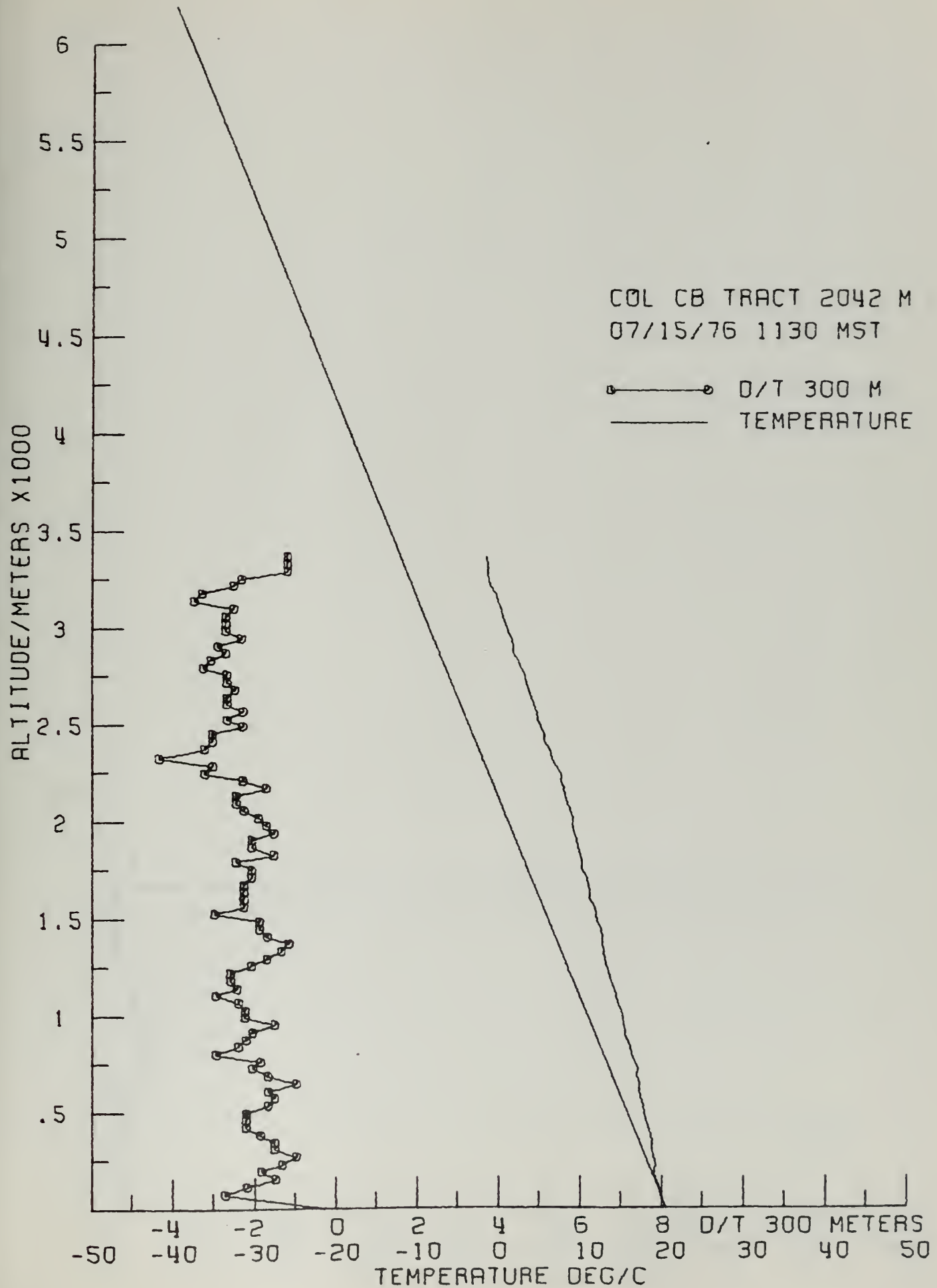
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)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07/15/76 1130 MST
D/T 300 M
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ALTITUDE/METERS X1000
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-4
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2
4
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D/T 300 METERS
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-20
-10
0
10
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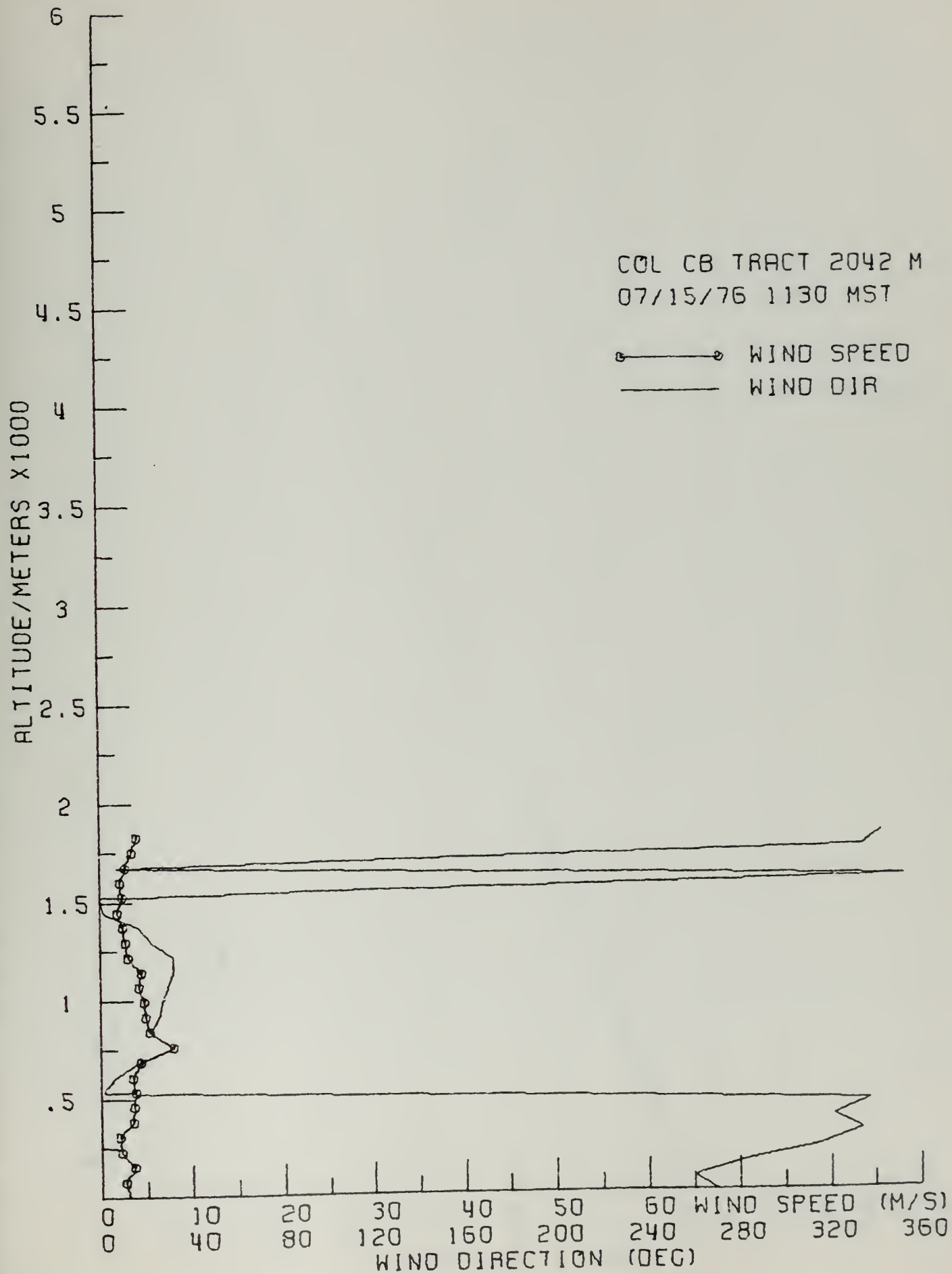
TEMPERATURE DEG/C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07/15/76 1130 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
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3.5
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1
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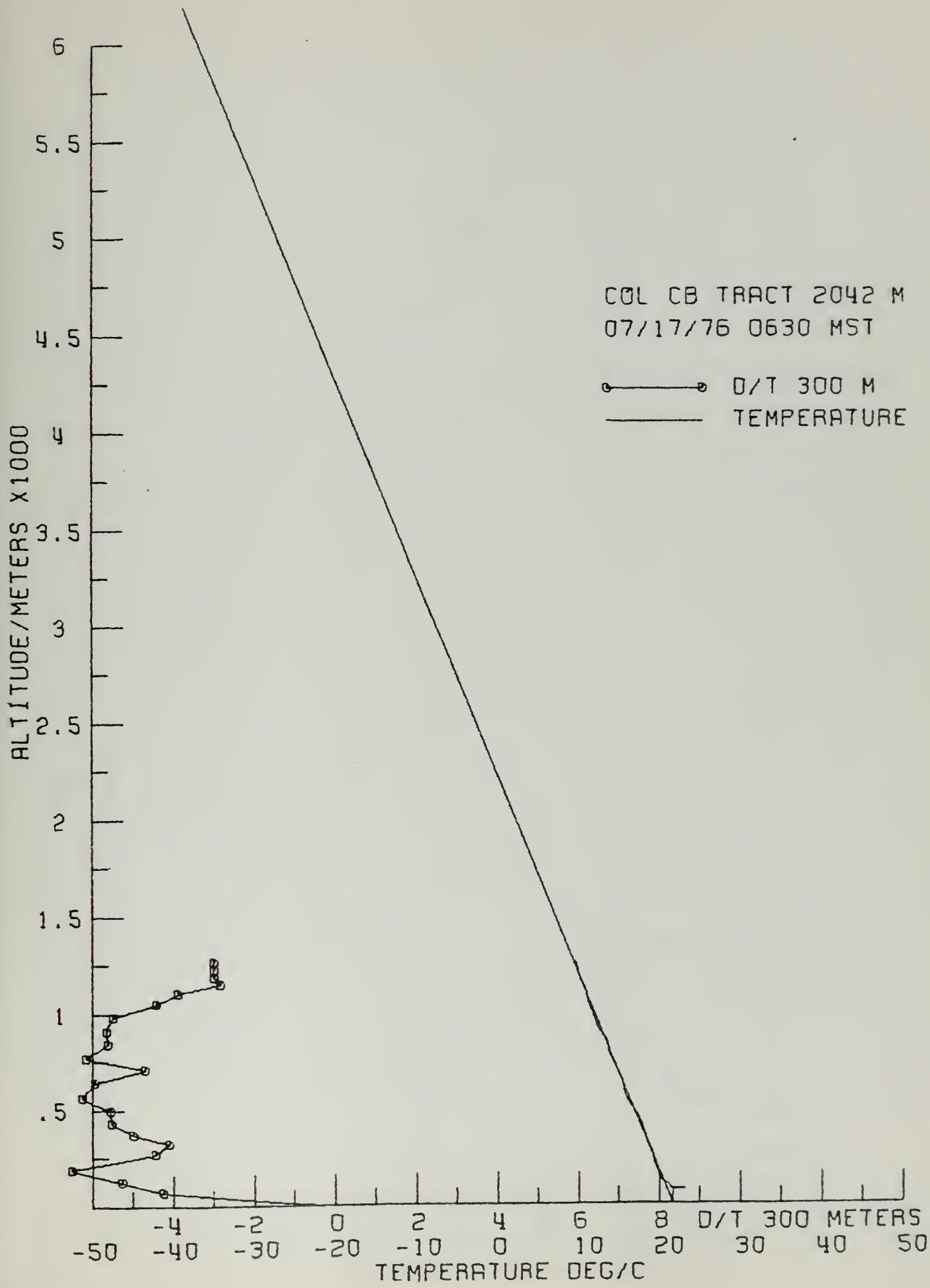
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)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07/17/76 0630 MST
D/T 300 M
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ALTITUDE/METERS X1000
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4
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D/T 300 METERS
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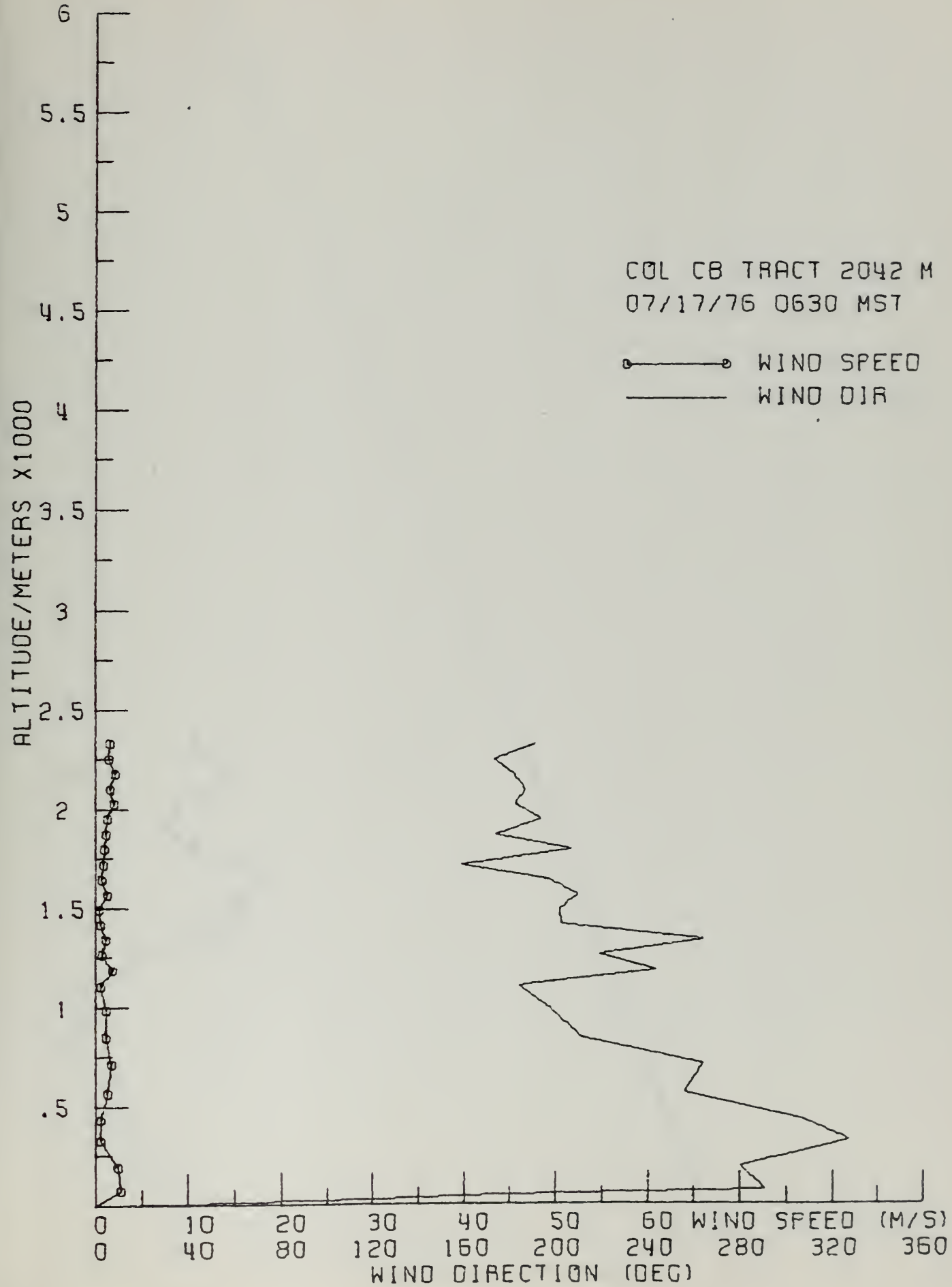
TEMPERATURE DEG/C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07/17/76 0630 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
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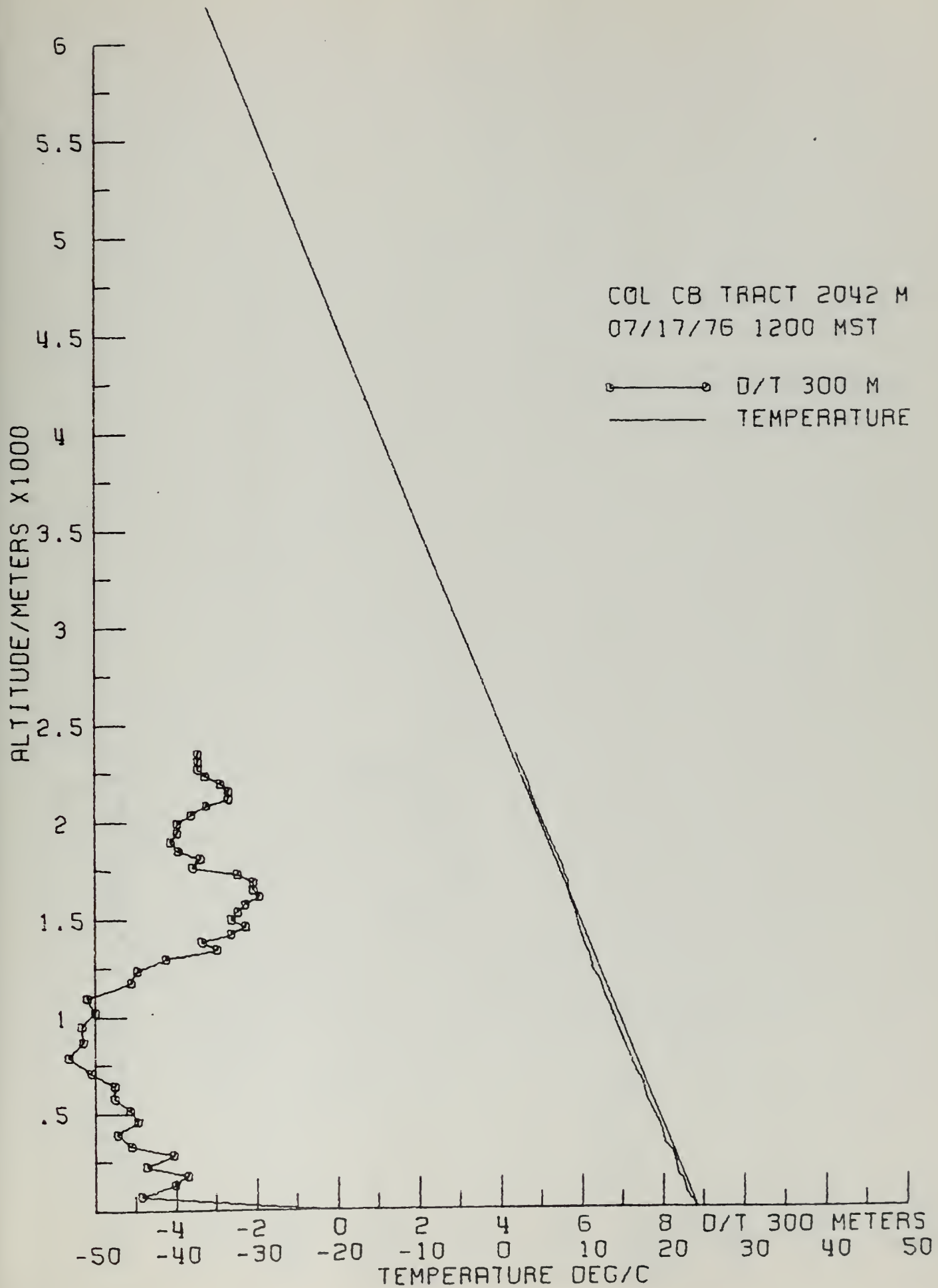
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)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D/T 300 M
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D/T 300 METERS
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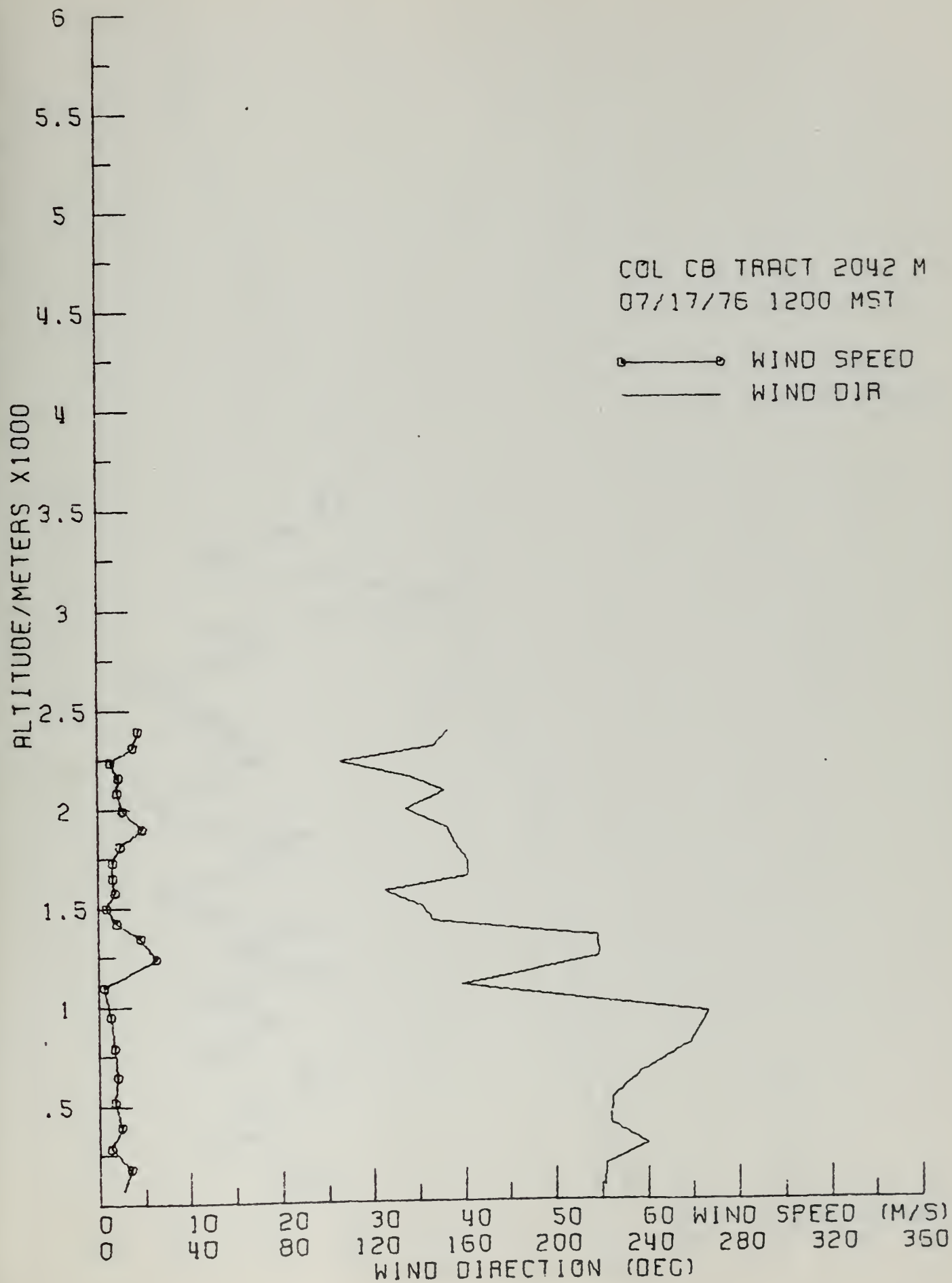
TEMPERATURE DEG/C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07/17/76 1200 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
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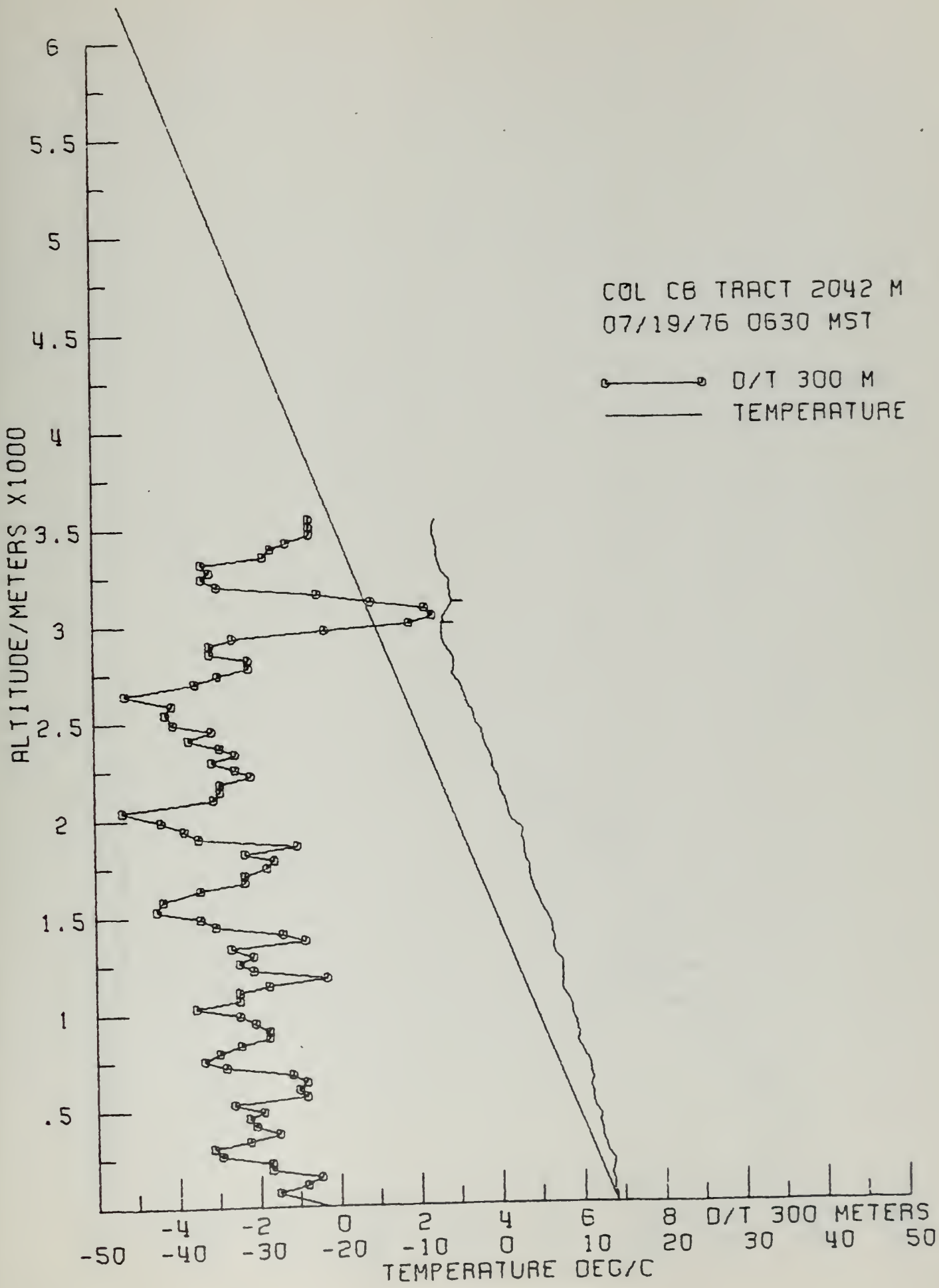
WIND DIRECTION (DEG)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07/19/76 0630 MST
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ALTITUDE/METERS X1000
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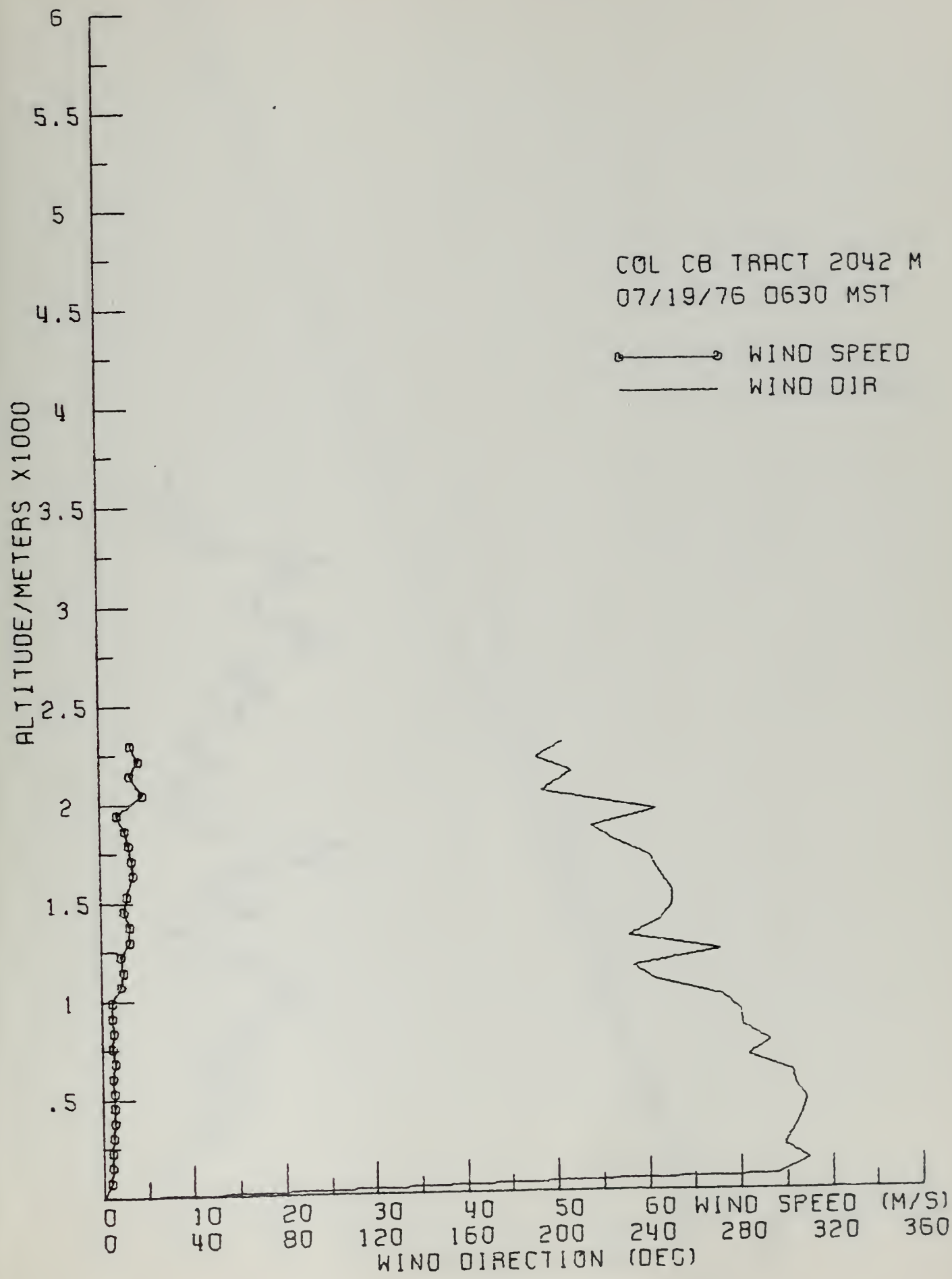
TEMPERATURE DEG/C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07/19/76 0630 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
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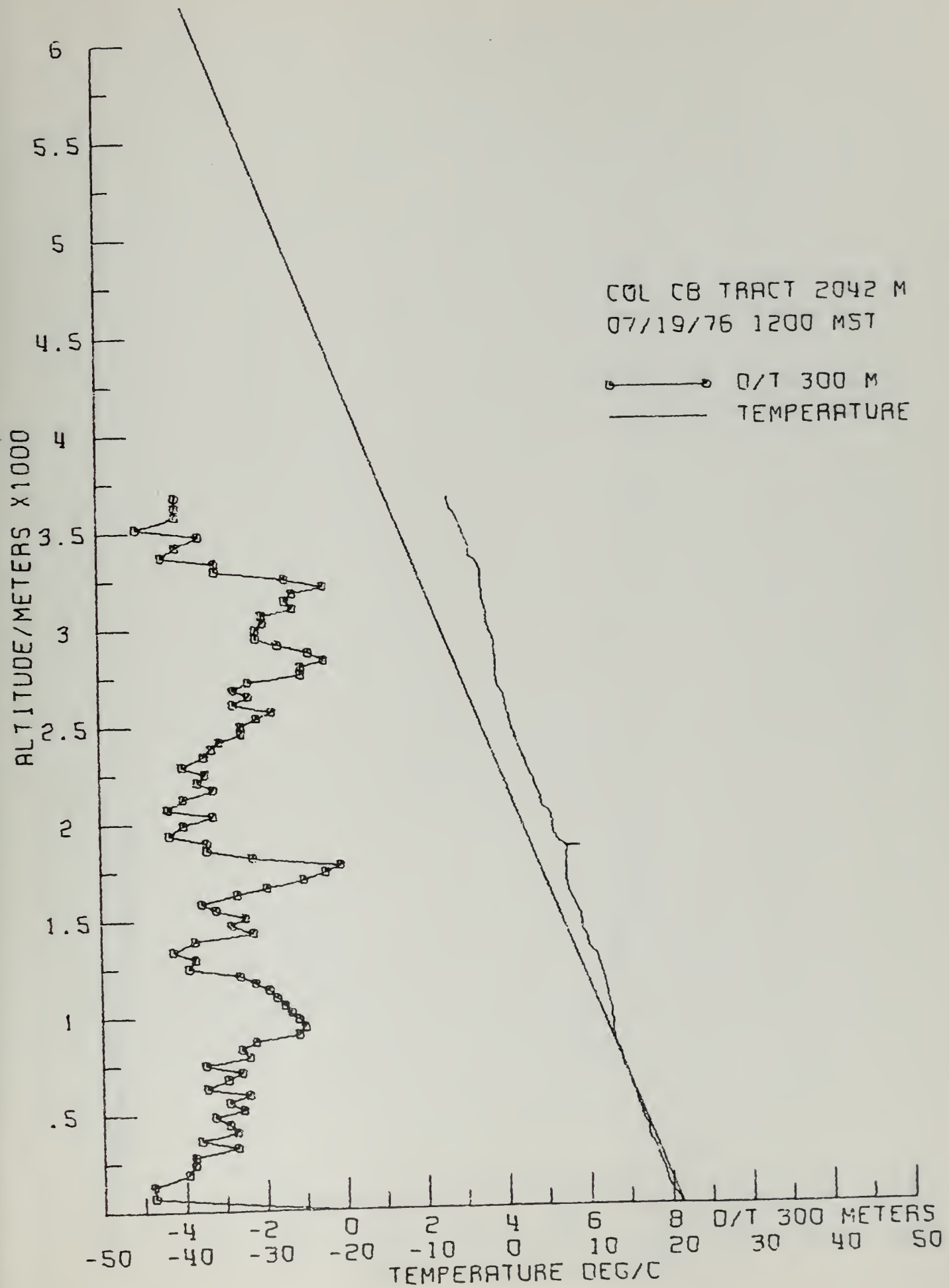
WIND DIRECTION (DEG)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O/T 300 M
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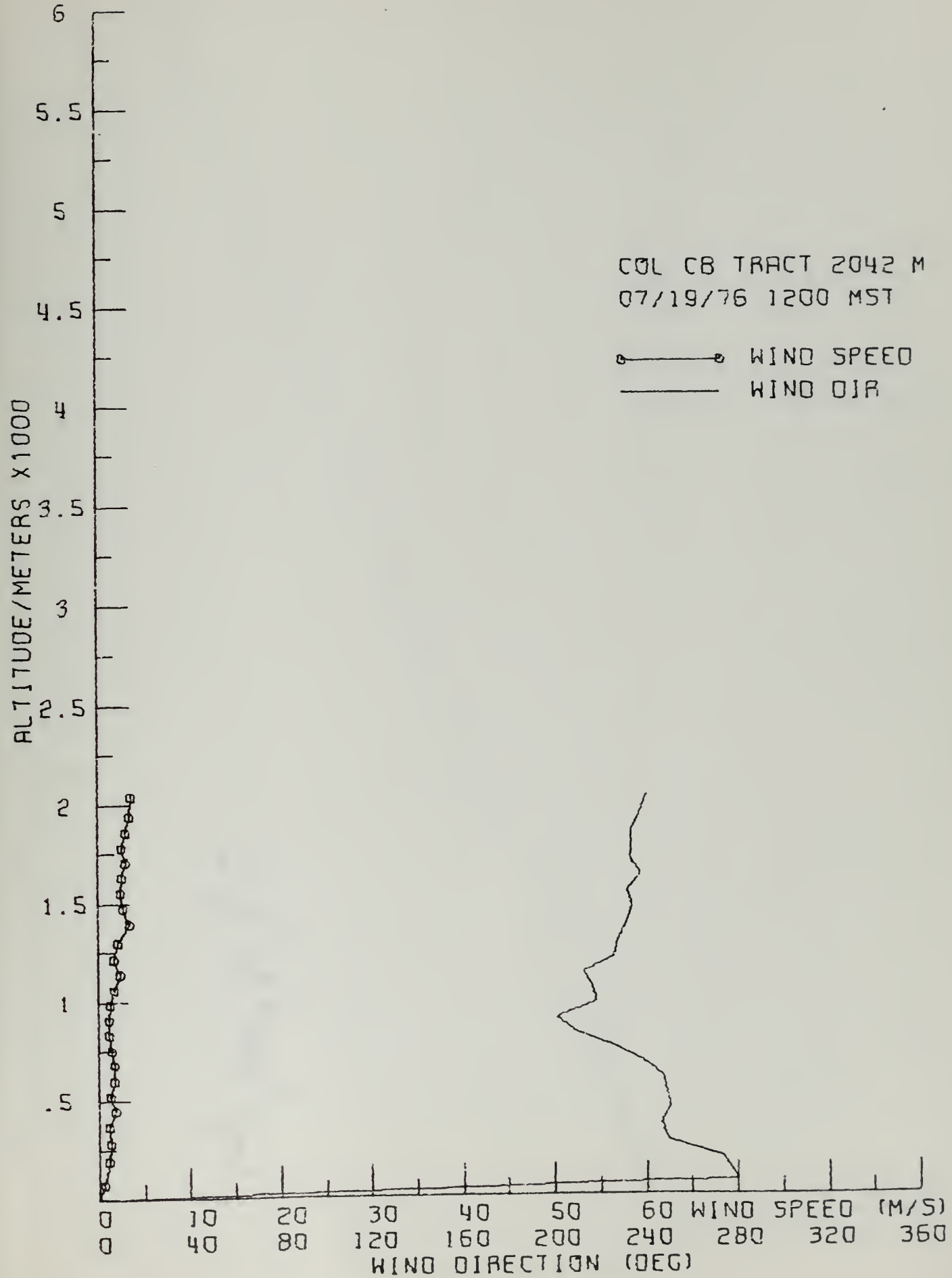
TEMPERATURE DEG/C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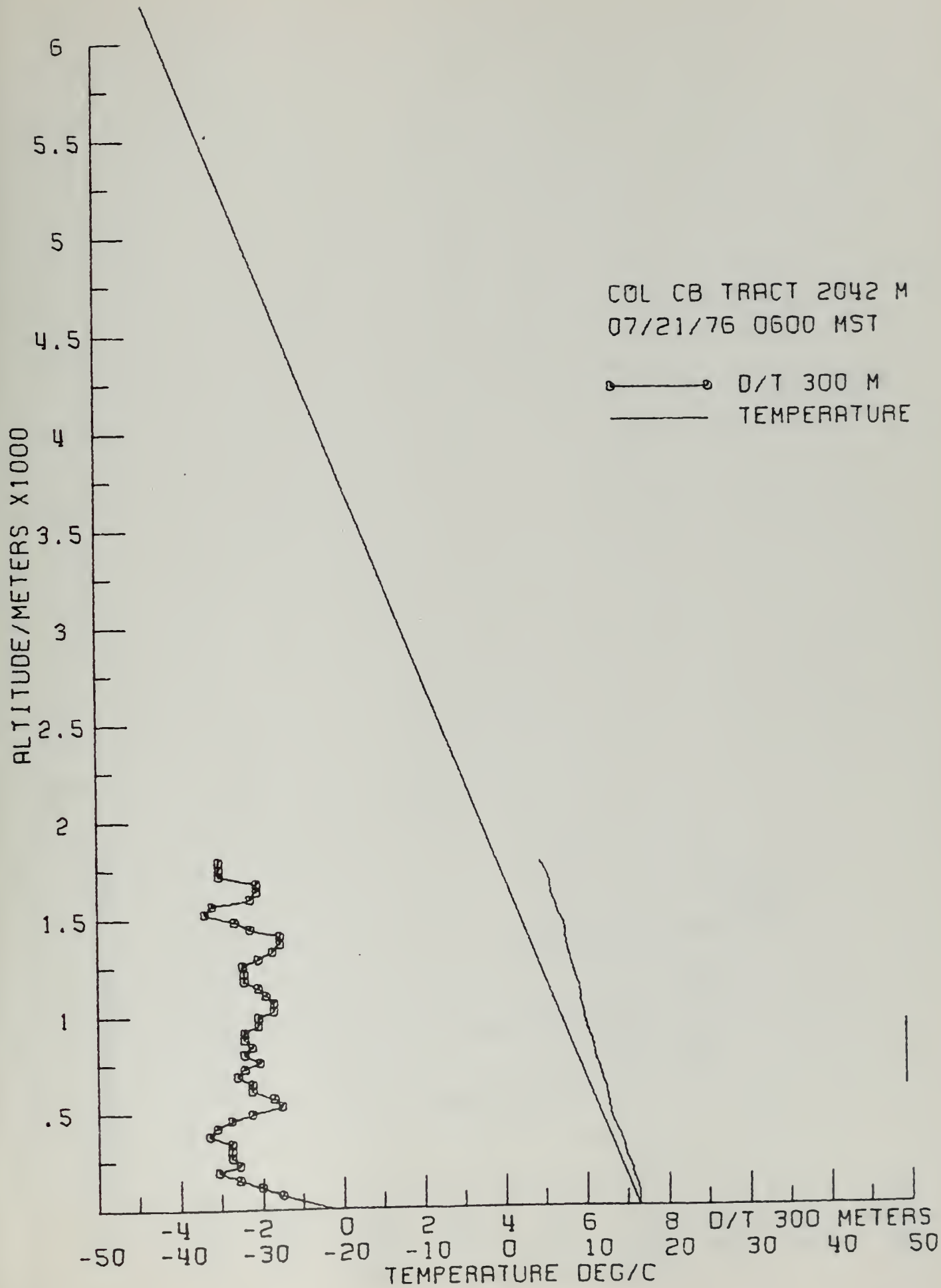
WIND DIRECTION (DEG)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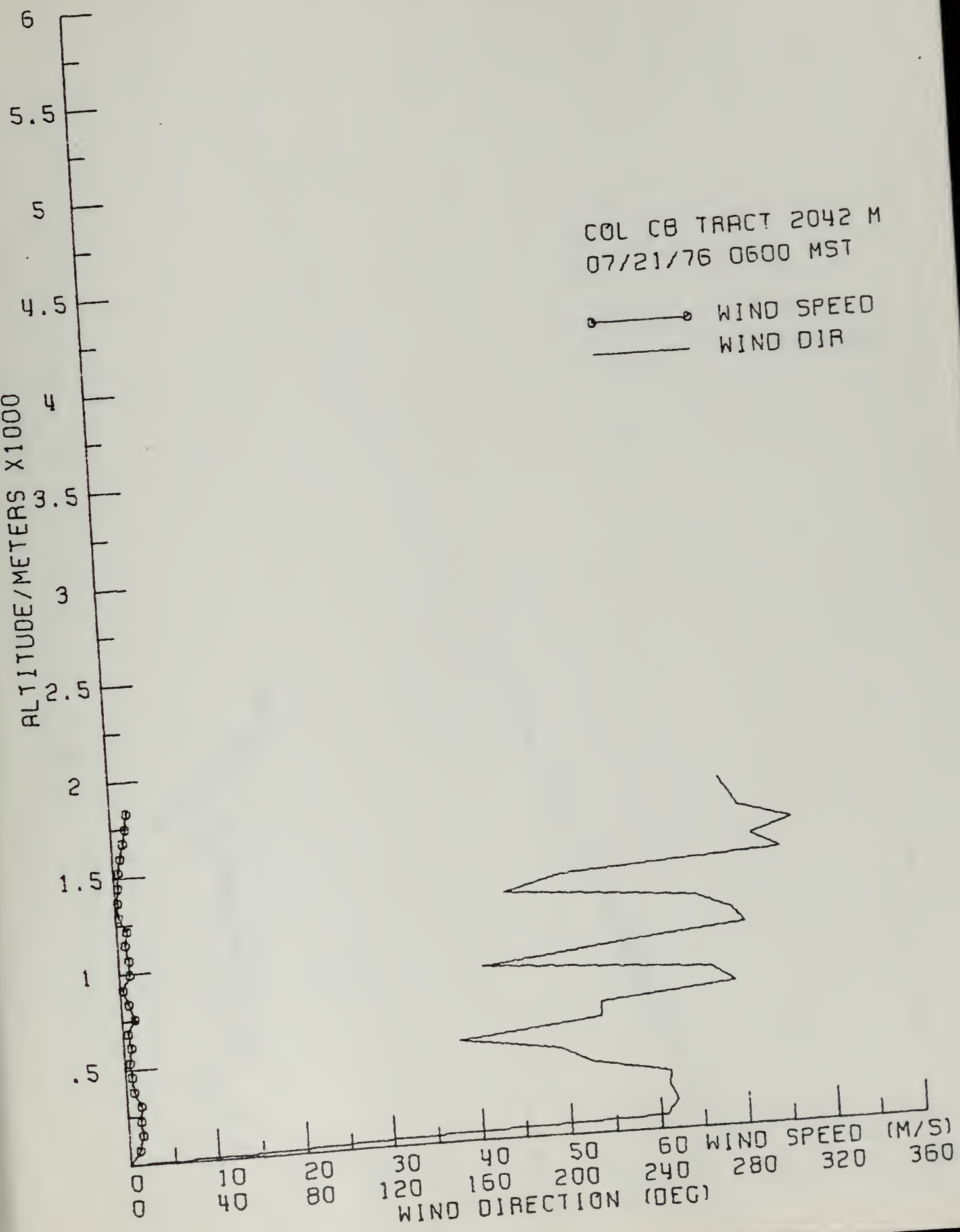
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WIND DIR
ALTITUDE/METERS X1000
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60 WIND SPEED (M/S)
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120
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200
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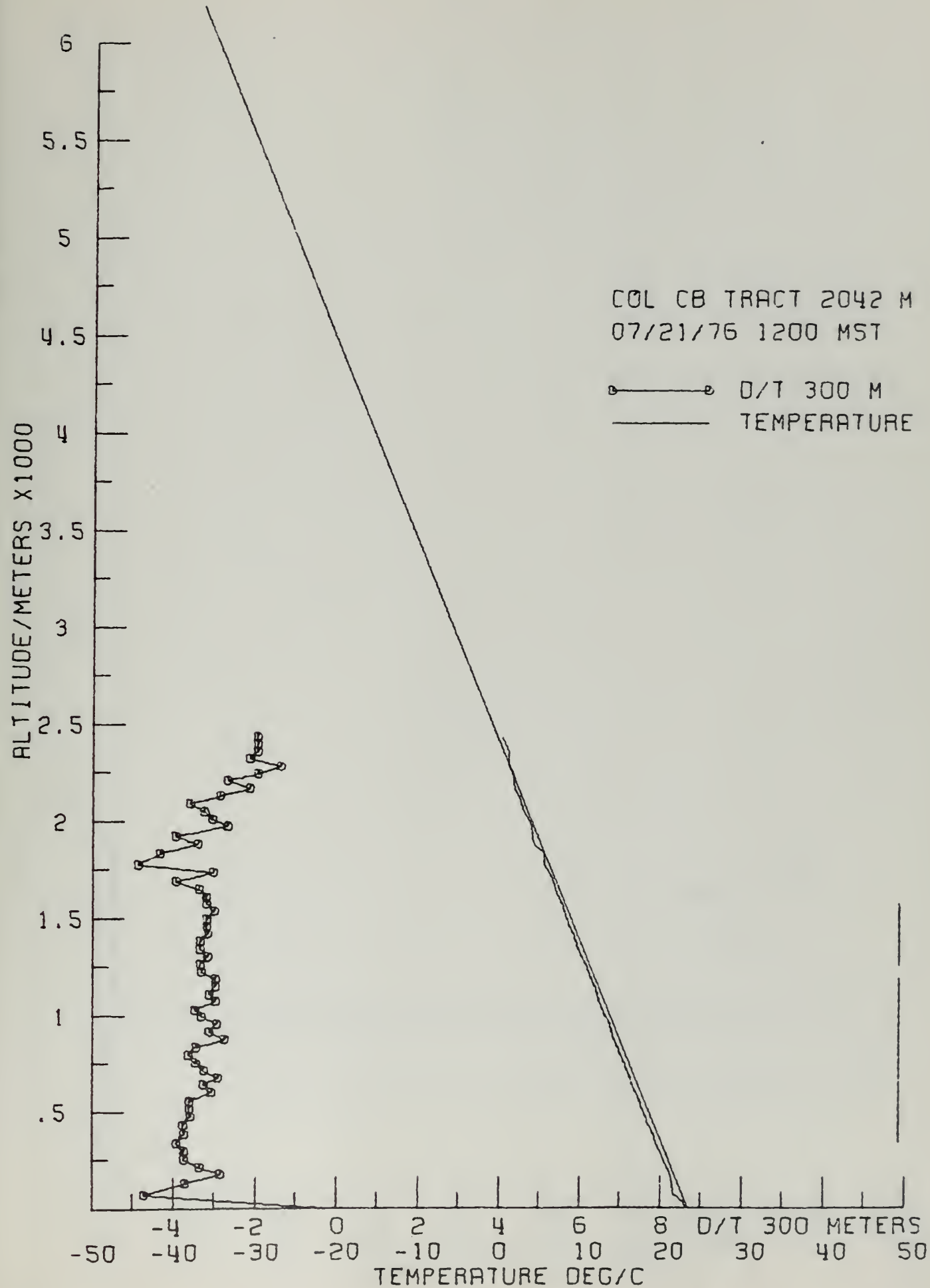
360
WIND DIRECTION (DEG)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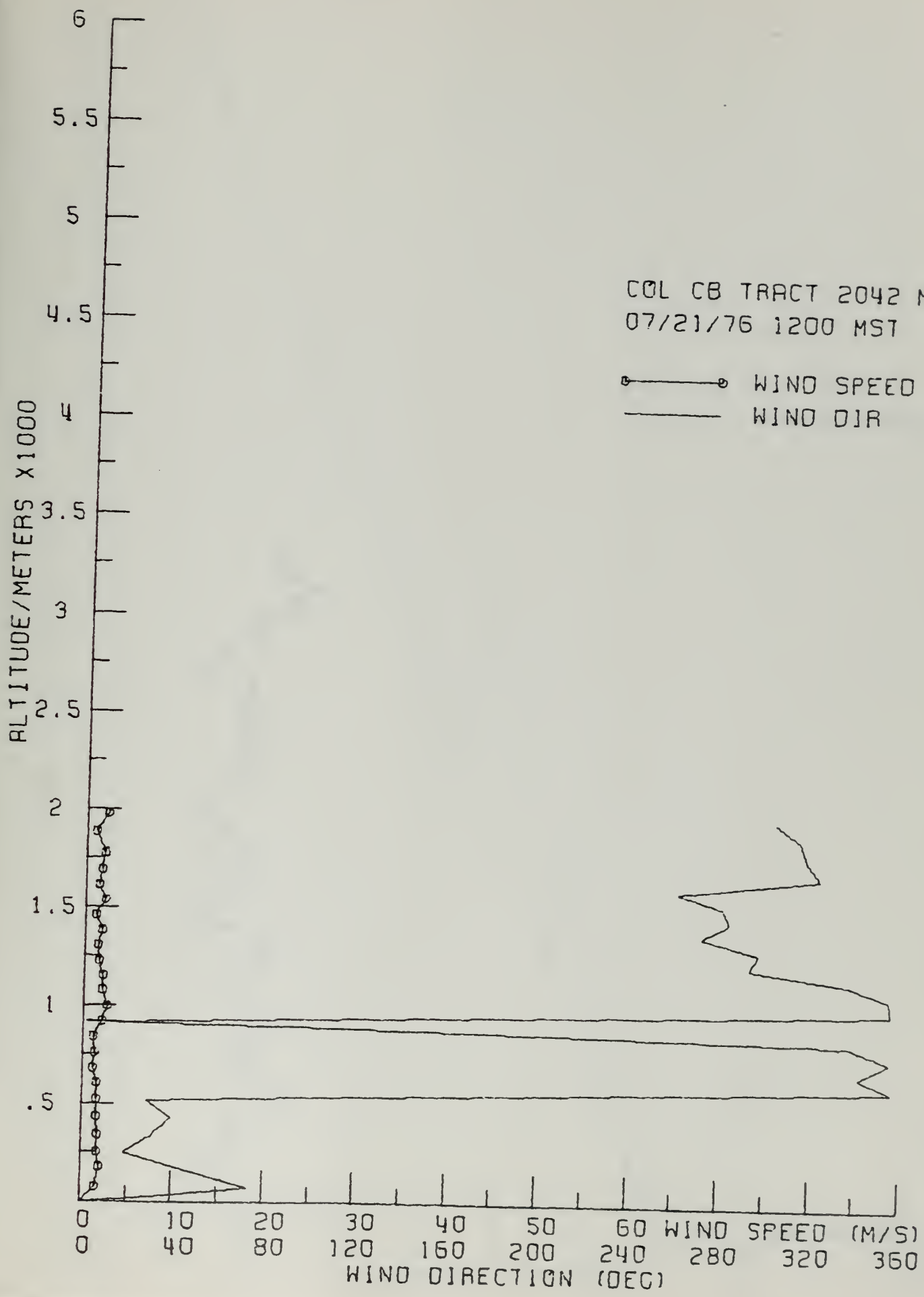
TEMPERATURE DEG/C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WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
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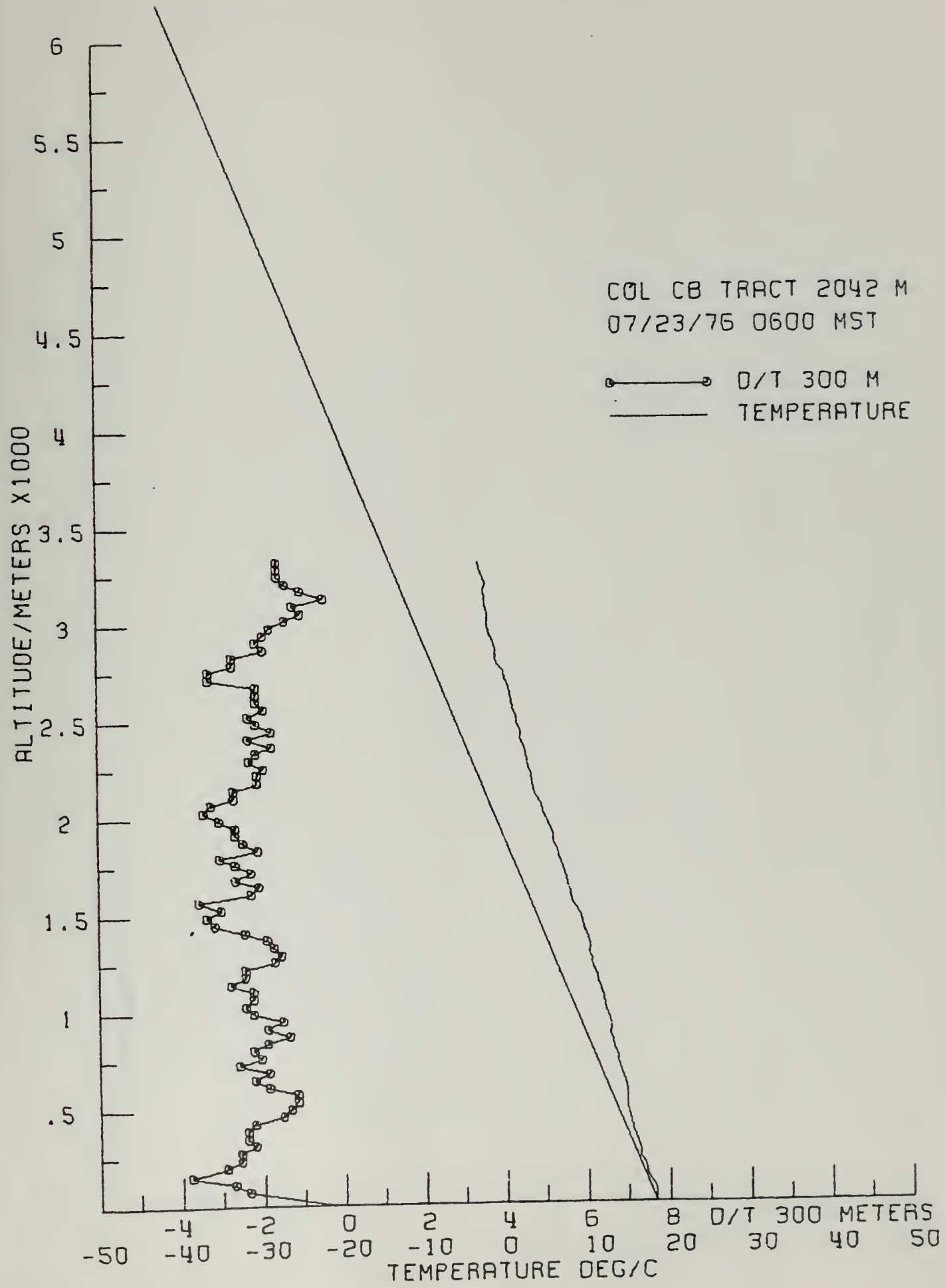
WIND DIRECTION (DEG)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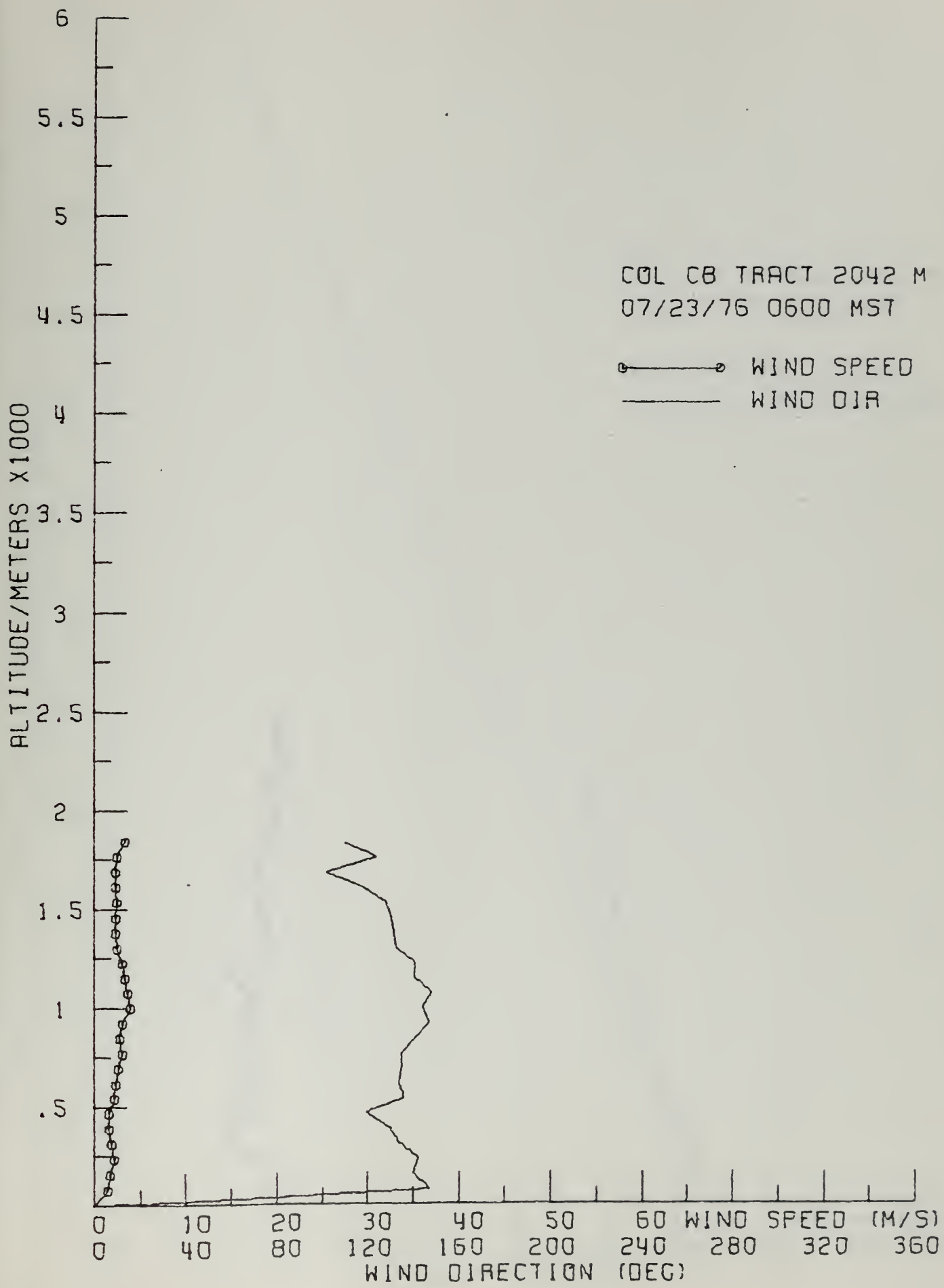
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07/23/76 0600 MST
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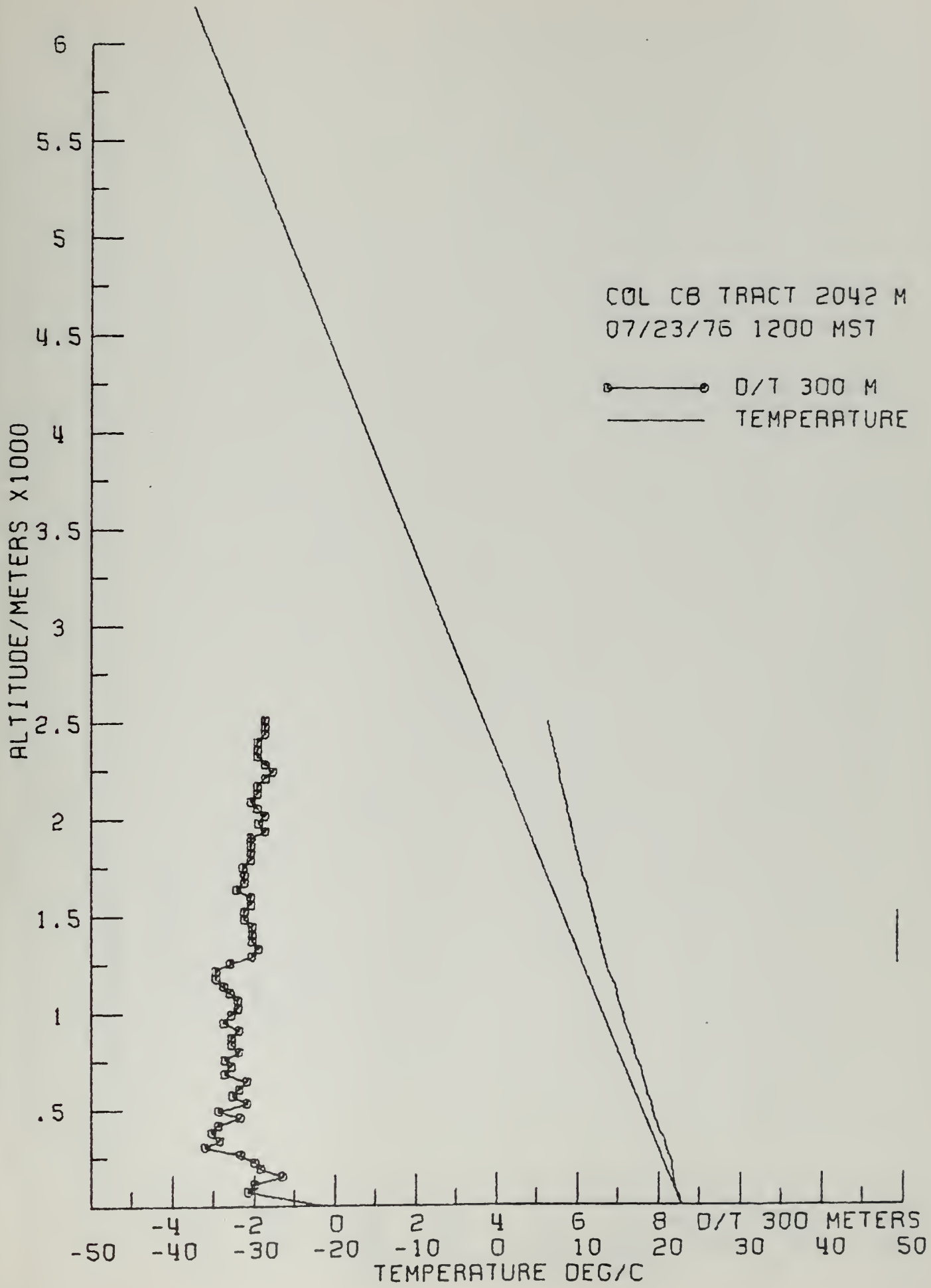
WIND DIRECTION (DEG)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O/T 300 M
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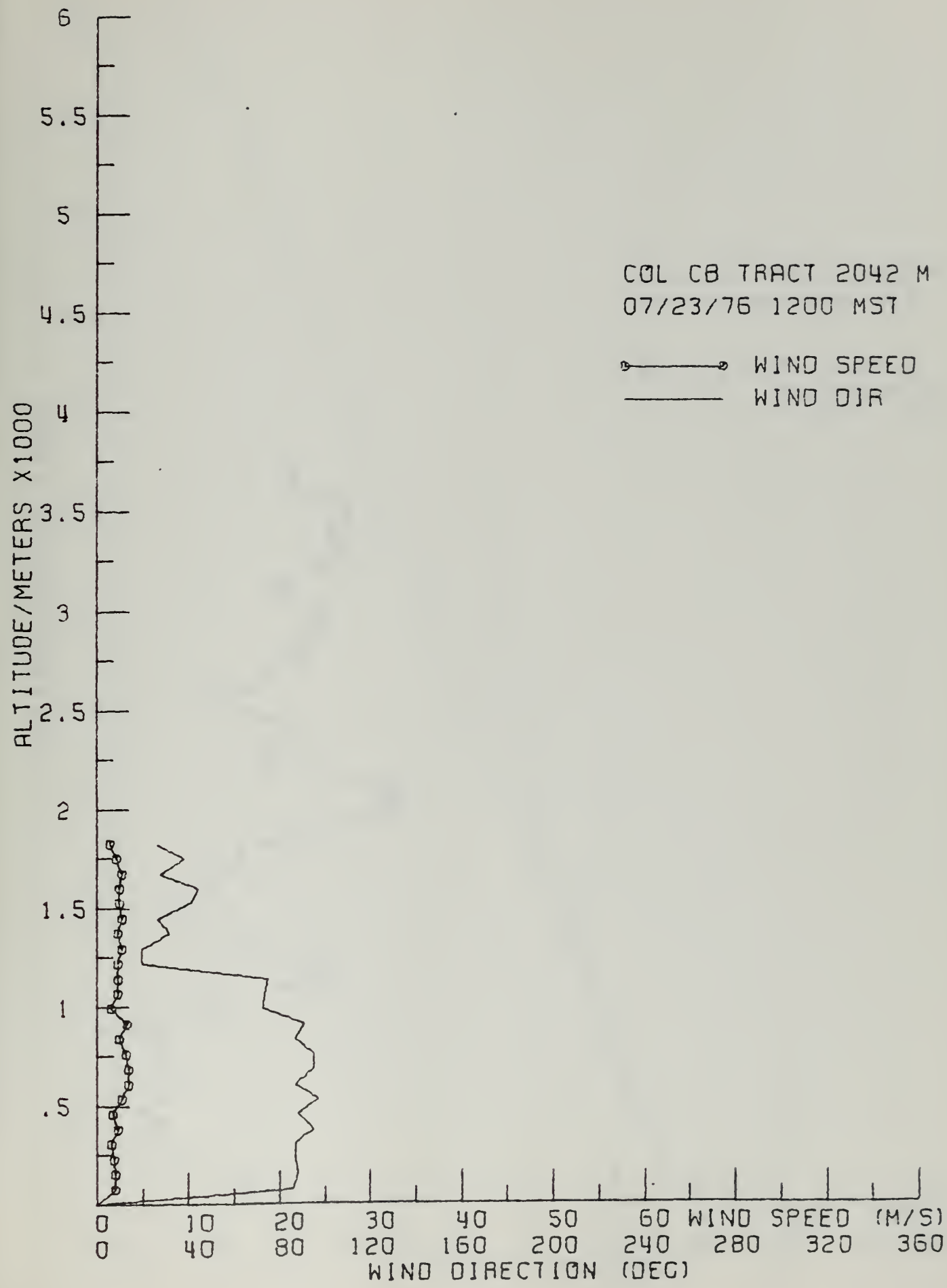
TEMPERATURE DEG/C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07/23/76 1200 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
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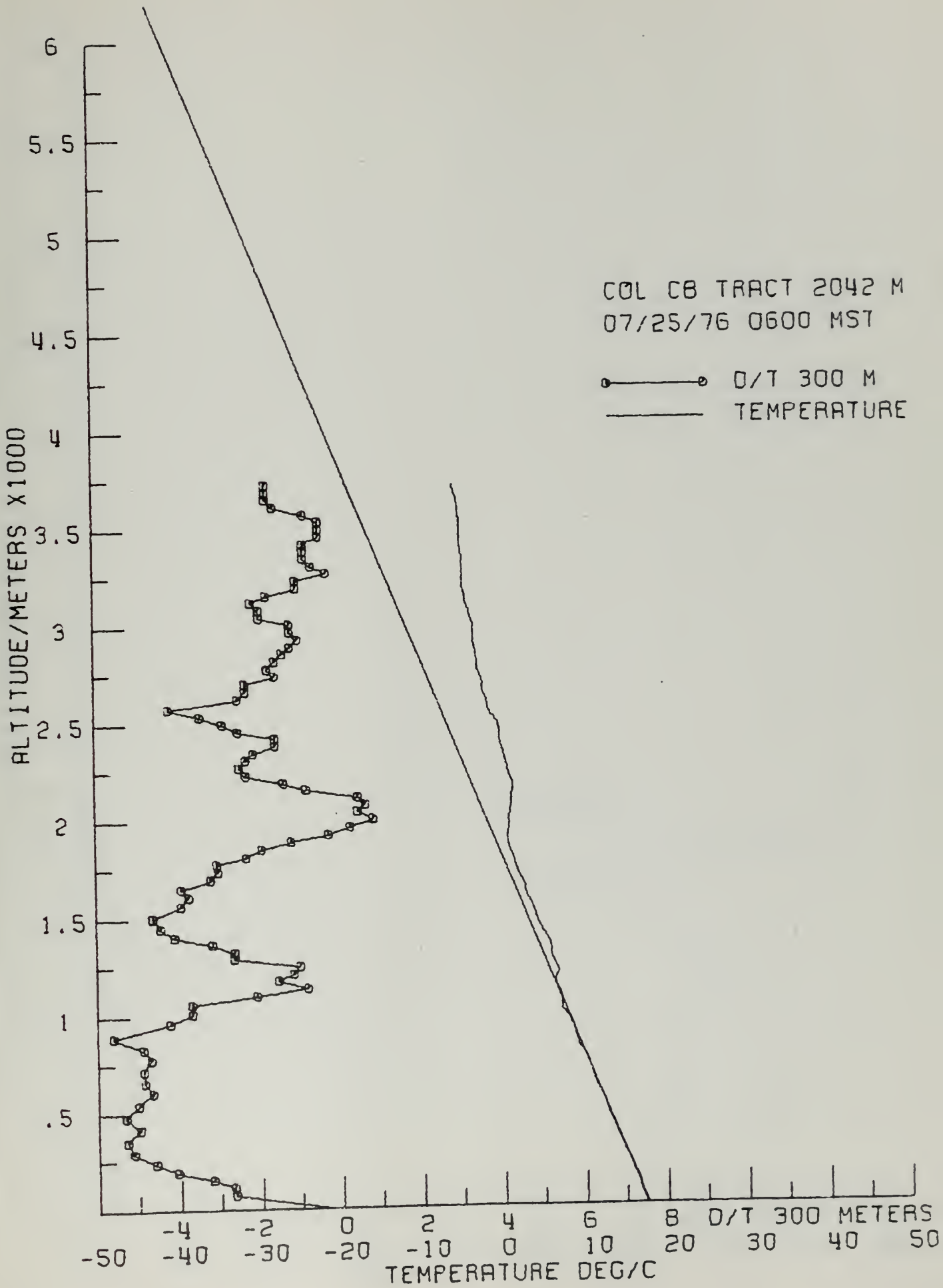
WIND DIRECTION (DEG)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07/25/76 0600 MST
D/T 300 M
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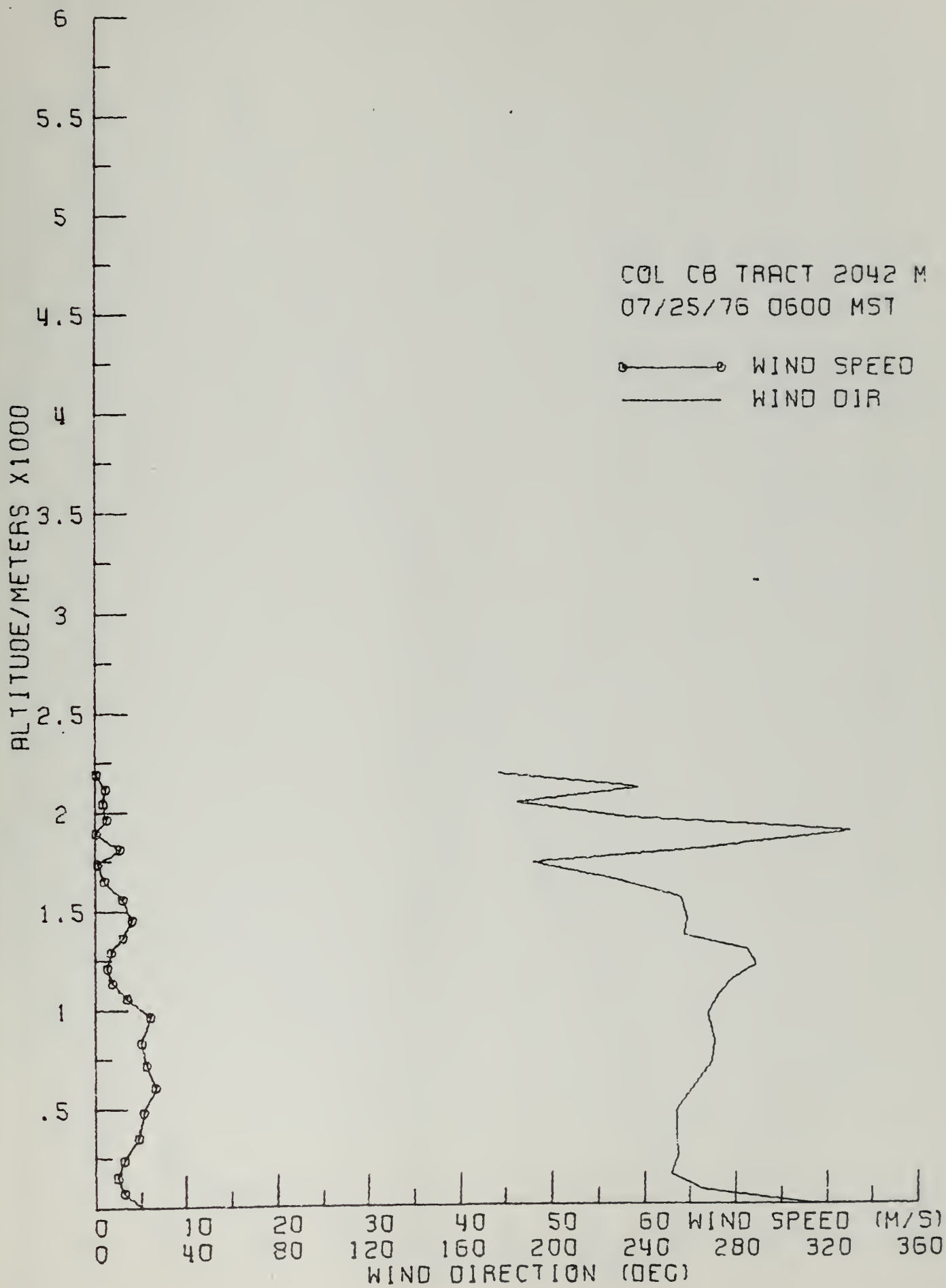
TEMPERATURE DEG/C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07/25/76 0600 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
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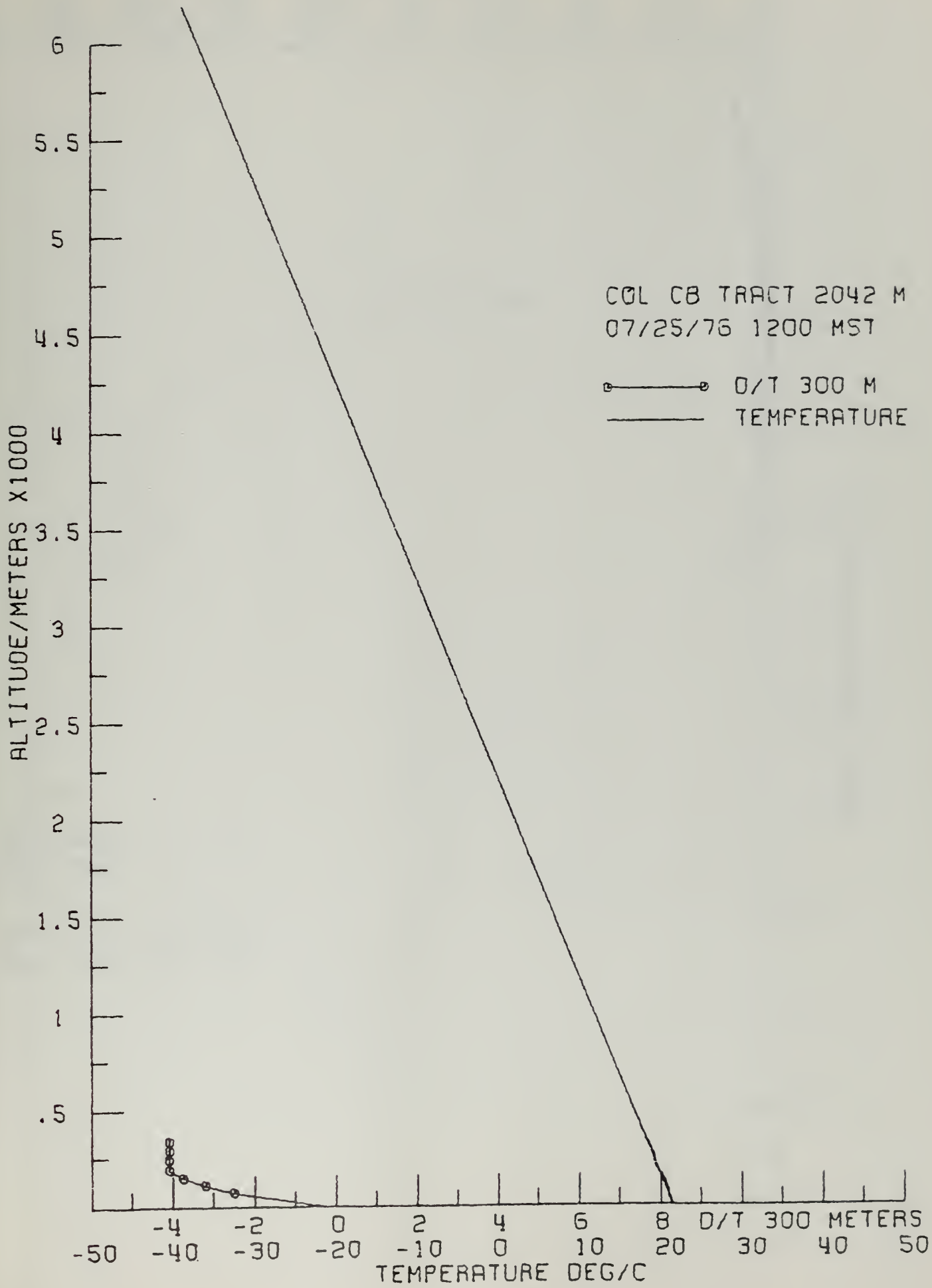
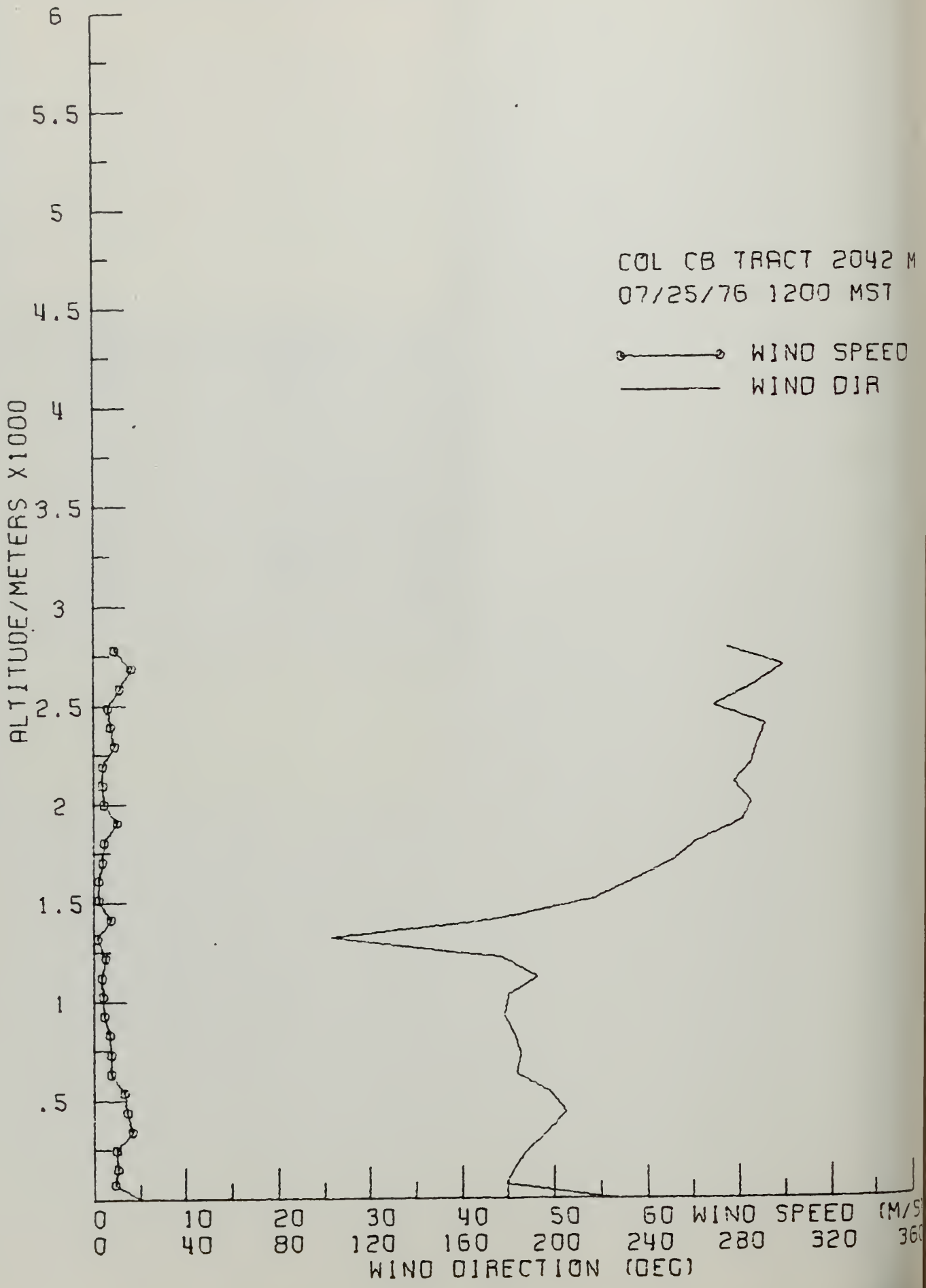
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


COL CB TRACT 2042 M
07/25/76 1200 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4
-2
0
2
4
6
8
D/T 300 METERS
-50
-40
-30
-20
-10
0
10
20
30
40
50
TEMPERATURE DEG/C


COL CB TRACT 2042 M
07/25/76 1200 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)